

OKI

MICROLINE 294

TROUBLESHOOTING MANUAL with COMPONENT PARTS LIST

Preface

This manual describes detailed troubleshooting **of the** component parts for **ML294/T** and provides its parts list.

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| TBMB - Printed Circuit Board Assembly | 4TL4042-1141A1 |

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Component Parts List

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|--|------------------|-----|
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| Rev.3 PCB version 3,4 | |

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| Appendix: Explanation of the personality module short plug . . . | APP-1 |
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Troubleshooting Flow Chart

1. Description

This Troubleshooting Flow Chart for the component parts for ~~ML294/F~~ is intended **mainly for** repair of their printed circuit board (PCB) assemblies, and the troubleshooting must be performed by persons with a certain degree of relevant technical knowledge.

2. Troubleshooting Tools

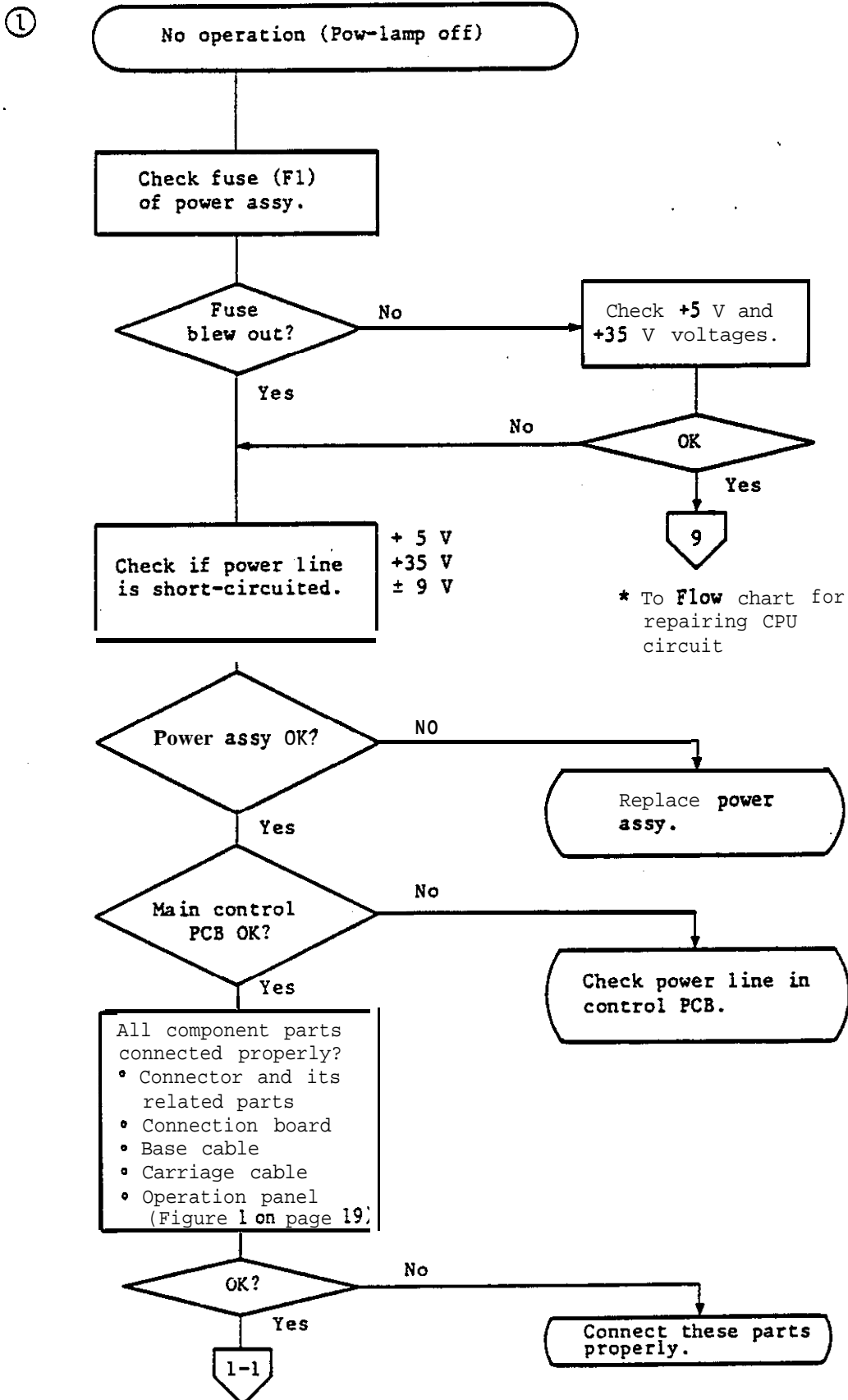
Besides general maintenance tools, the troubleshooting of the component parts for ~~ML294/T~~ requires tools as **listed below**:

| Troubleshooting tools | Remarks |
|--|---|
| Maintenance cord (for Main P.C.B) | 3YU5009-1011G1 |
| Extension cord (for P/M) | 3YU5003-1833G1 |
| Oscilloscope | Approx. 20 MHz or more |
| Power cord | |
| Soldering gun | On-the-counter (Preferably with a narrow hand) |

3. Troubleshooting Table

| Division | Trouble symptom | Item No. |
|--|--|----------|
| Trouble occurring while power in on | No operation (Pow-lamp off) | 1 |
| | No space operation (Sel-lamp flashing) | 2 |
| | Abnormal space operation (Vibration and/or system hung-up) | 3 |
| Trouble occurring during printing or reception | No ribbon feed or color change | 4 |
| | Misprinting or dot missing. | 5 |
| | No line feed | 6 |
| | No operation panel switch operation | 7 |
| | Interface reception error | 8 |
| PCB repair | Flow charts for repairing main control PCB | |
| | Flow chart for repairing CPU circuit | 9 |
| | Flow chart for repairing space circuit | 10 |
| | Flow chart for repairing alarm circuit | 11 |
| | Flow chart for repairing ribbon motor circuit | 12 |
| | Flow chart for repairing head drive circuit | 13 |
| | Flow chart for repairing line feed circuit | 14 |
| | Flow chart for repairing operation panel | 15 |
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| | Flow chart for repairing ROM/RAM PCB | 16 |
| | Flow chart for repairing parallel interface circuit | 17 |
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| | Flow chart for repairing optional PCB | 19 |

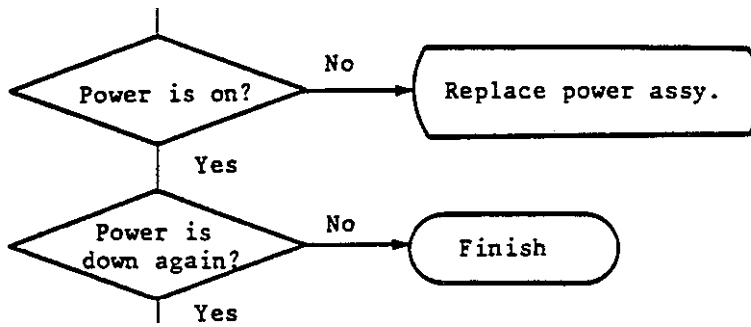
4. Troubleshooting Flow Chart



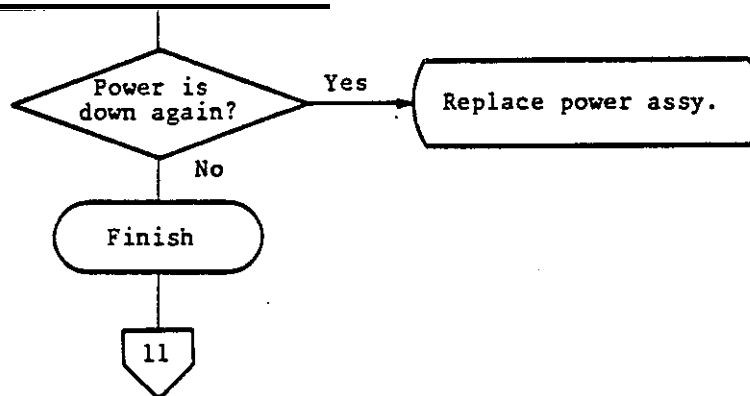
1-1
Q

Turn on power again
after about 5 min.

Note: When the power failure has
been caused by a trouble
with the alarm circuit, it
will not work for about 5
minutes after removal **of**
the trouble.



Replace main control
PCB (TBMB PCB).



* To Flow chart for repairing alarm circuit

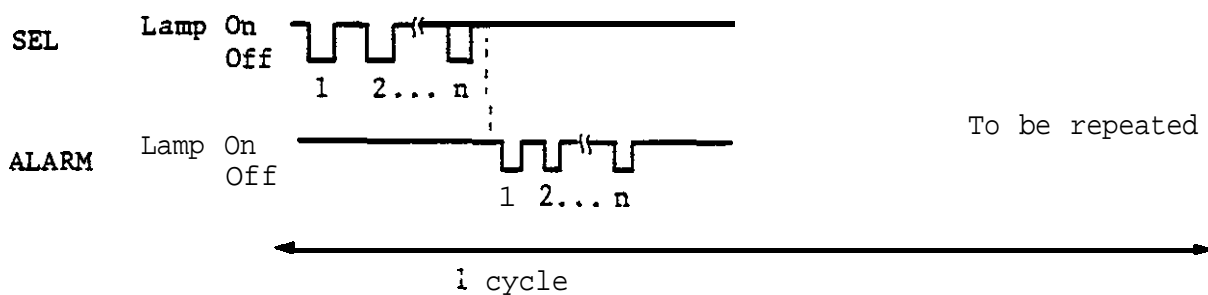
② No space operation (SEL-lamp flashing, ALARM-lamp flashing or ON)

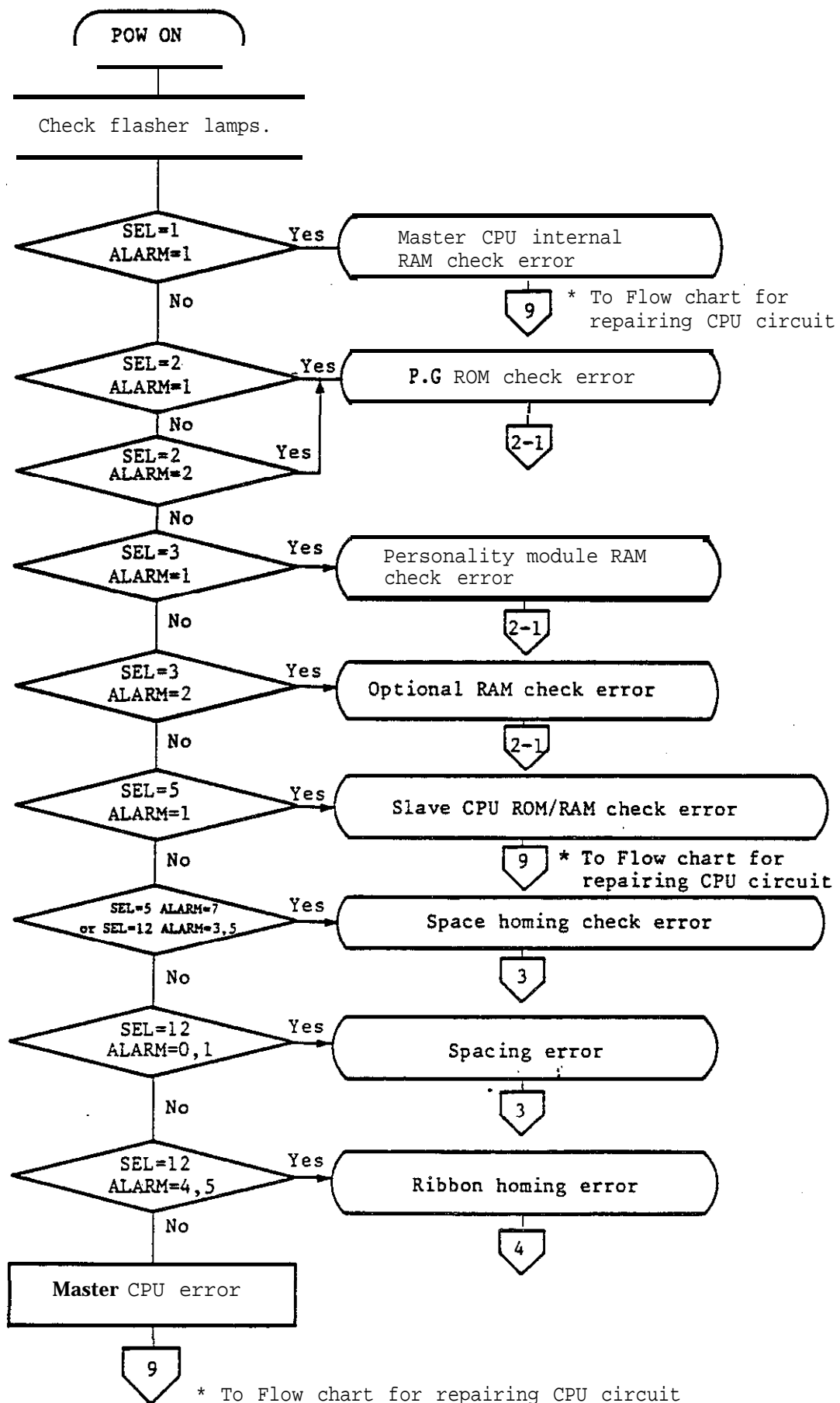
The SEL lamp will blink in any of the following cases:

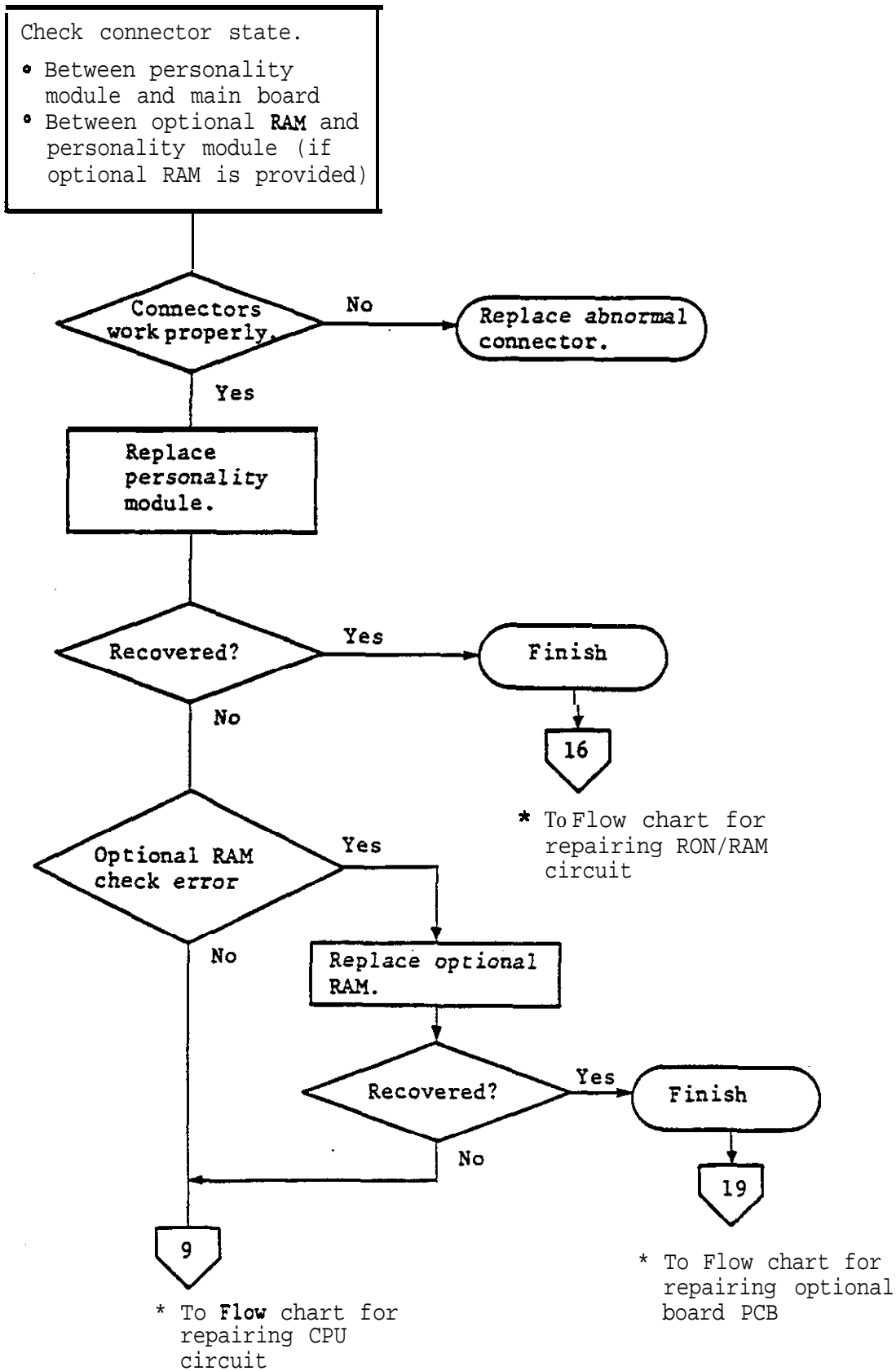
| Flashing lamp | | Description |
|---------------|---------|-------------------------------------|
| SEL | ALARM | |
| 1 | 1 | Master CPU check error (Q13) |
| 2 | 1 | PG ROM check error (P/M Q1) |
| | 2 | CG ROM check error (P/M Q2) |
| 3 | 1 | Master RAM check error (Q11) |
| | 2 | Optional RAM check error |
| 5 | 1 | Slave CPU ROM/RAM check error (Q16) |
| | 7 | Space Homing error |
| 12 | 0, 1 | Spacing error |
| | 3 | Space Homing error |
| | 4, 5 | Ribbon Homing error |
| 4 | 1 to 10 | Master CPU error (Q13) |

Note: Flashing form

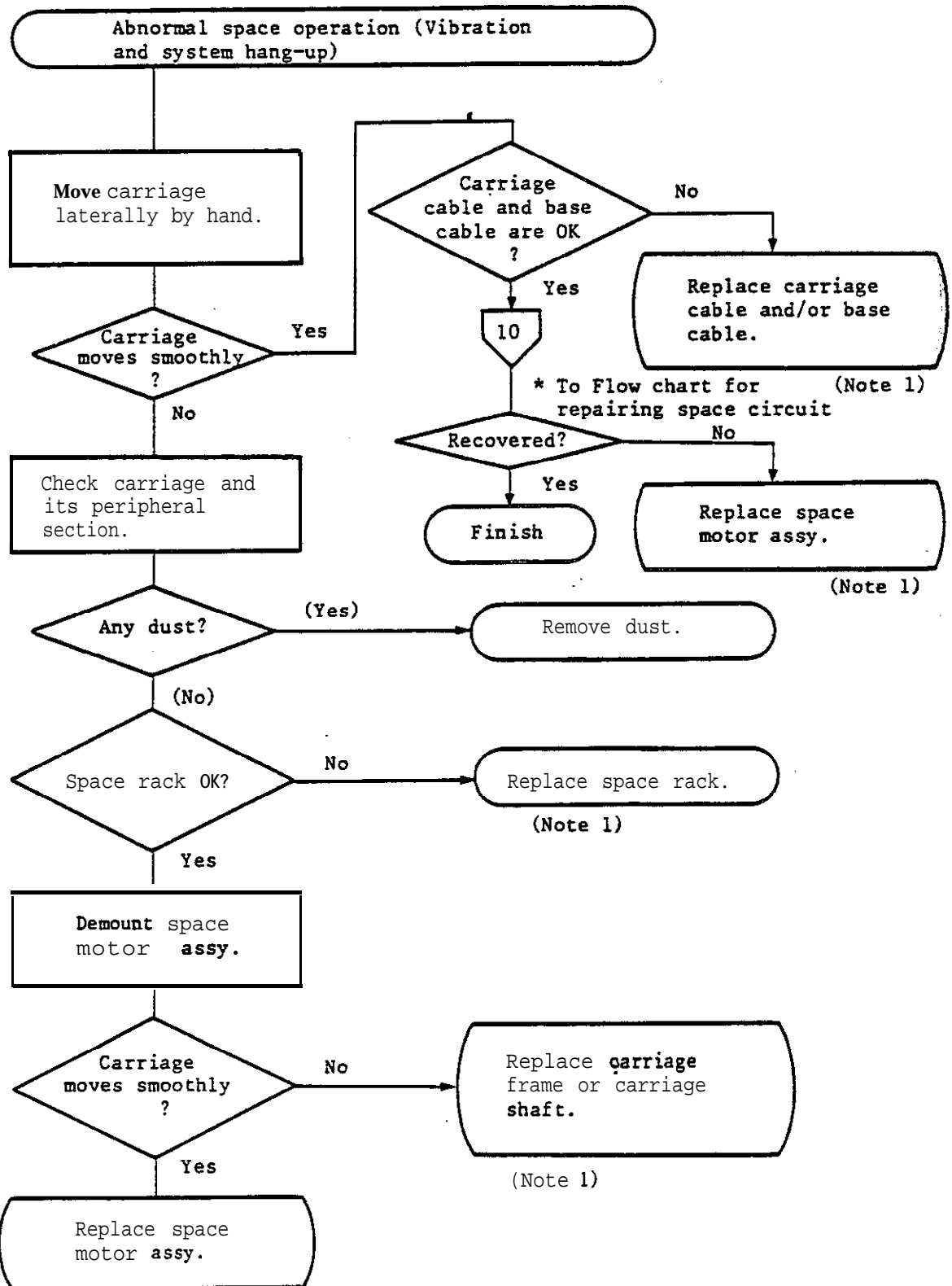
n: Lamp-off count





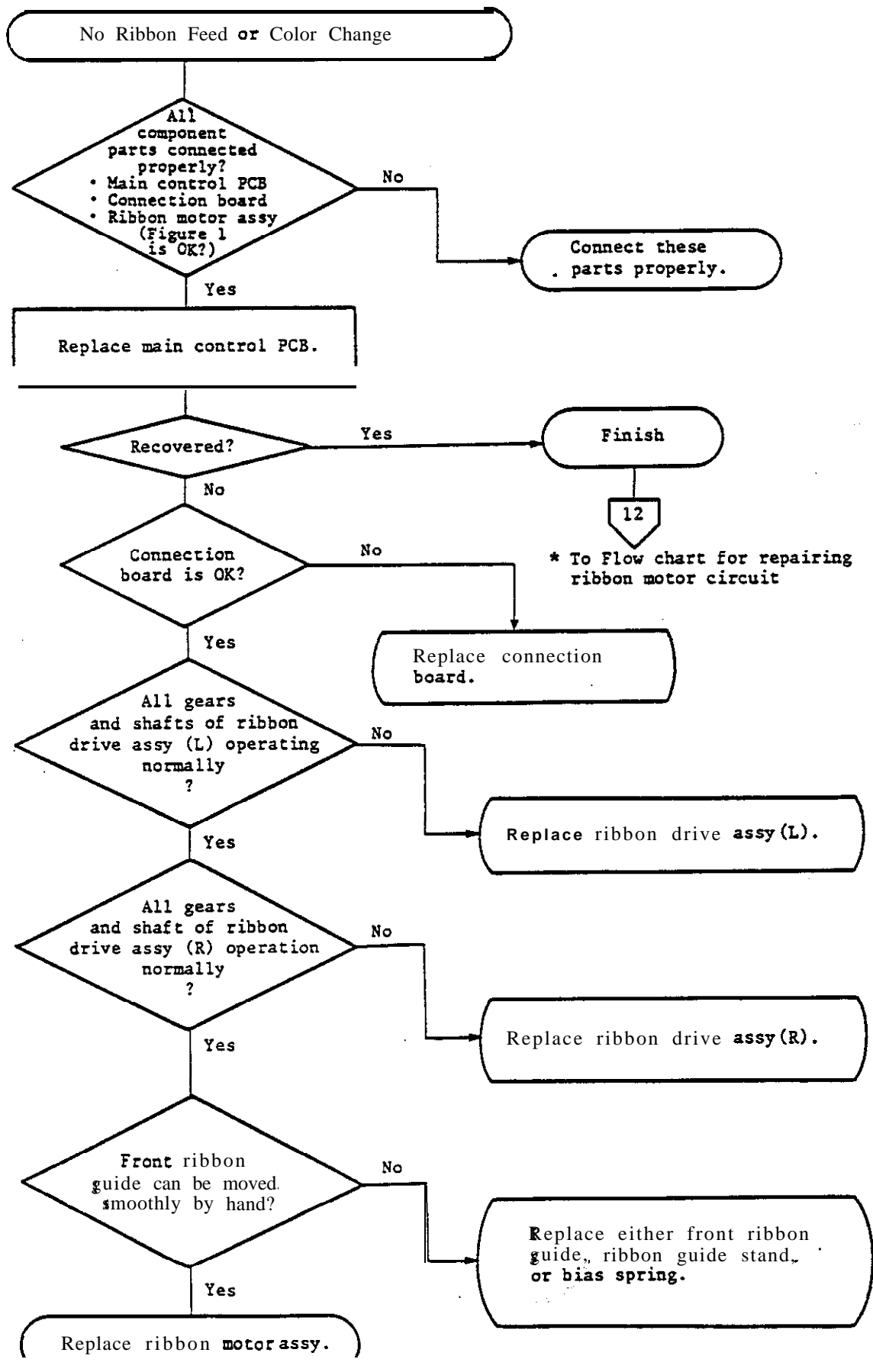


③

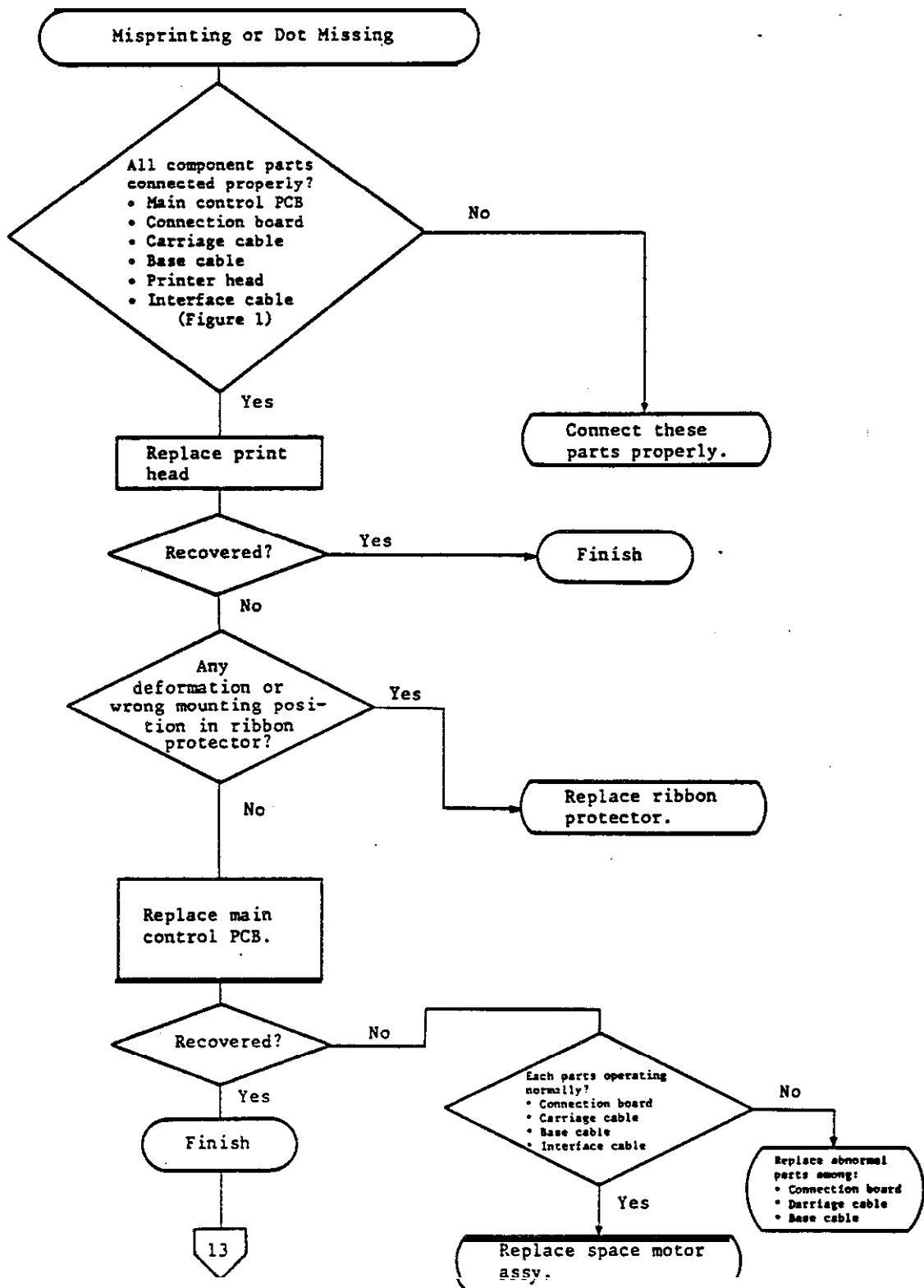


Note 1: Adjust head gap after replacing the component parts.

④

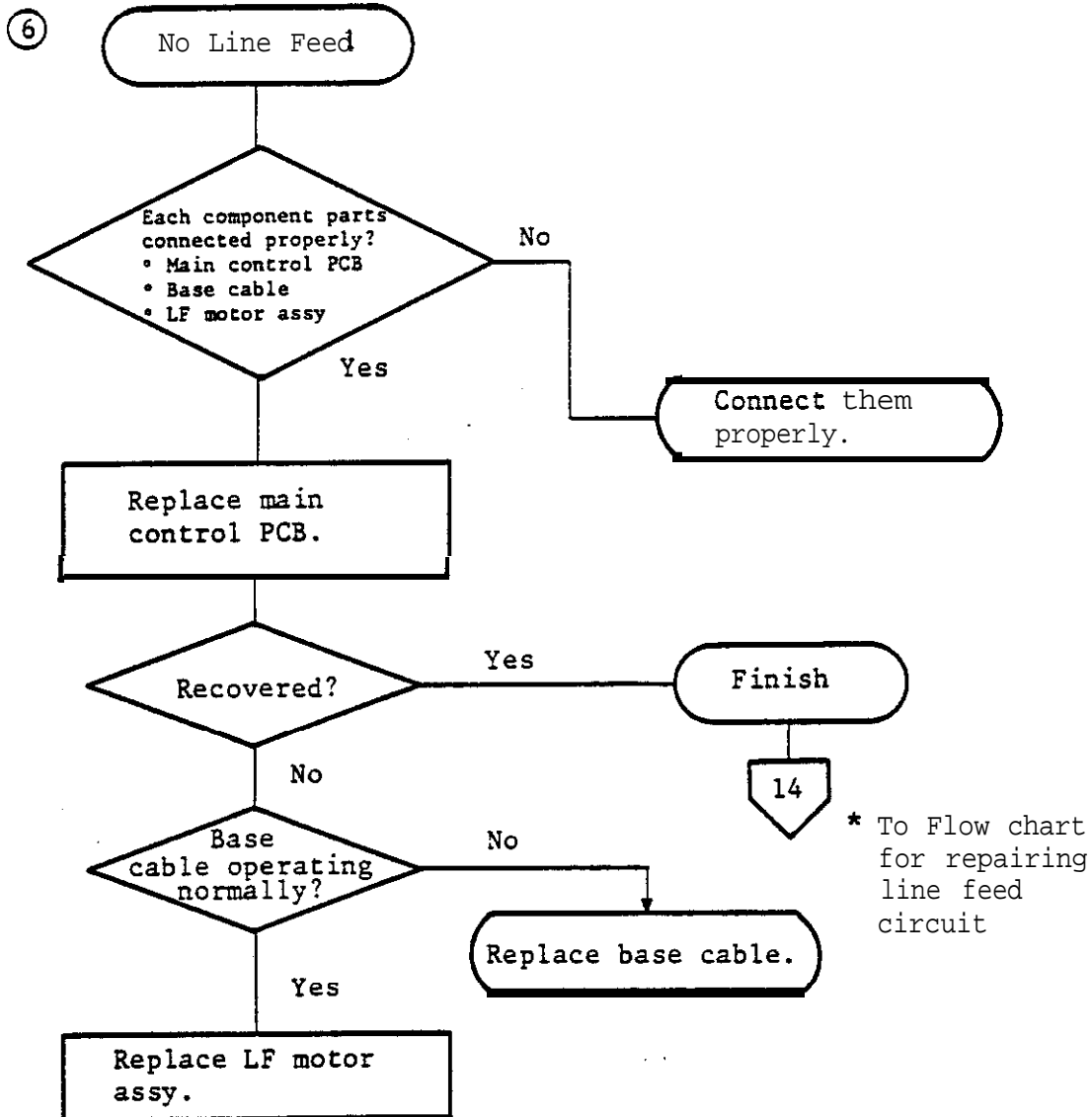


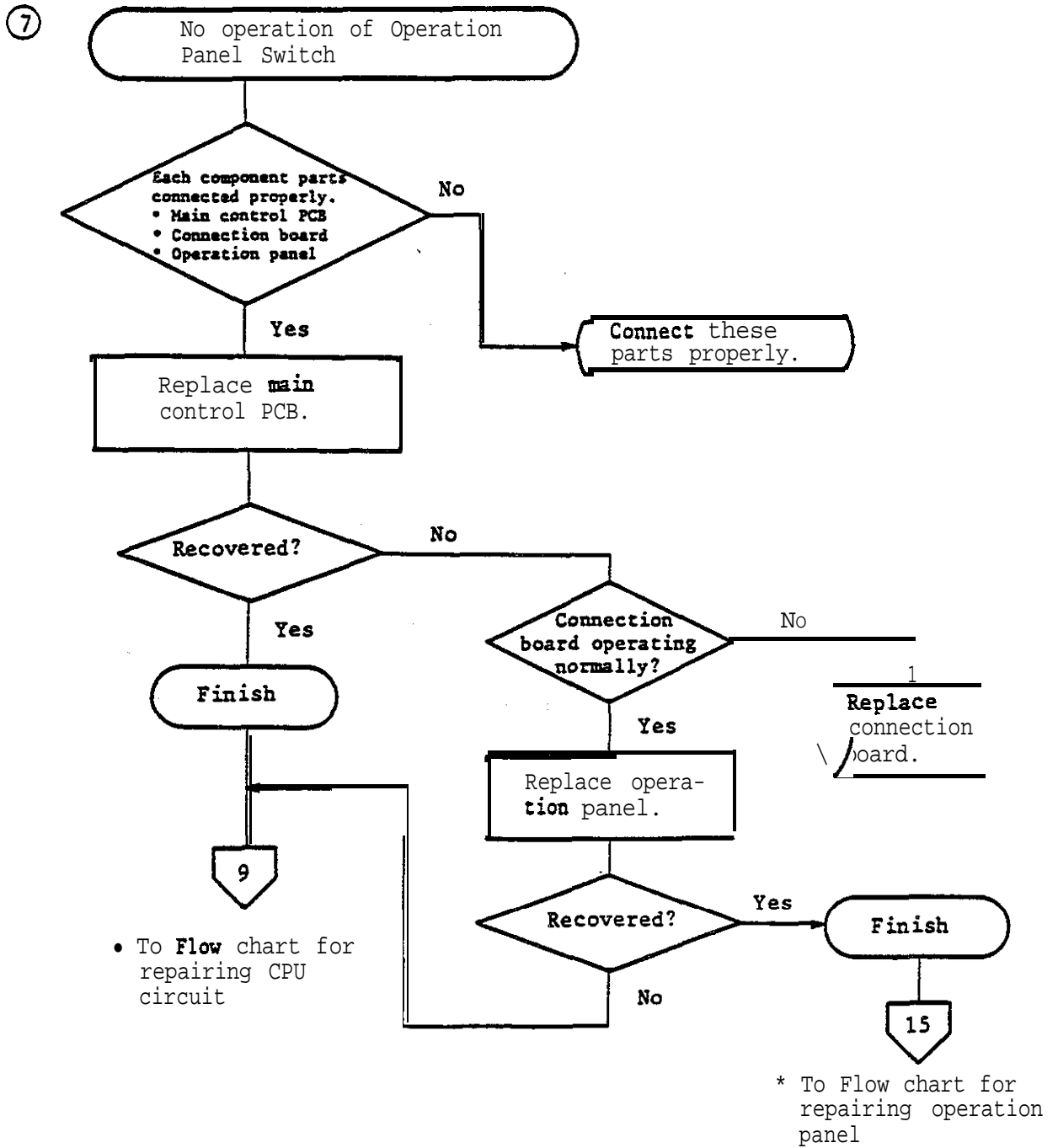
⑤

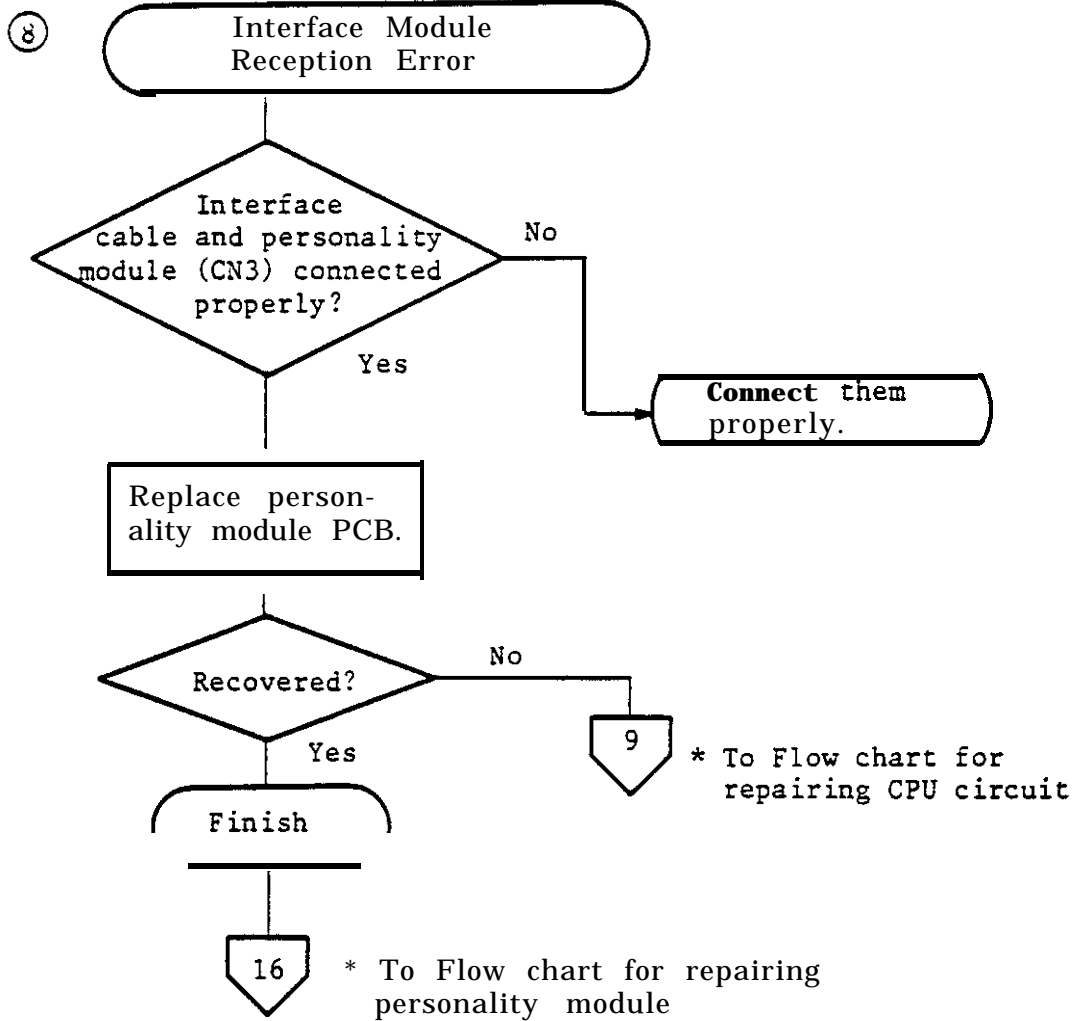


* To Flow chart for repairing head drive circuit

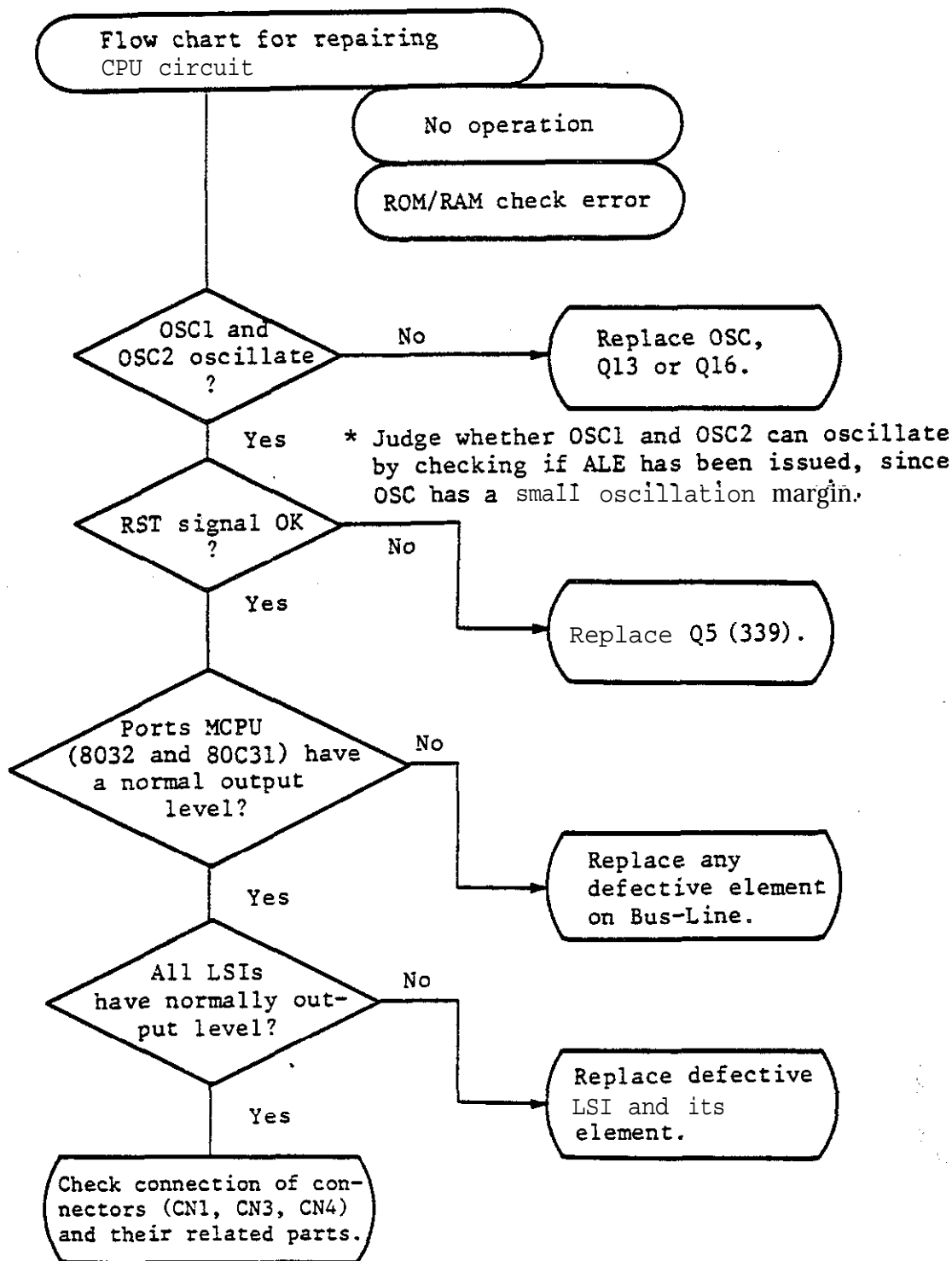
• Adjust the head gap after replacing the component parts.



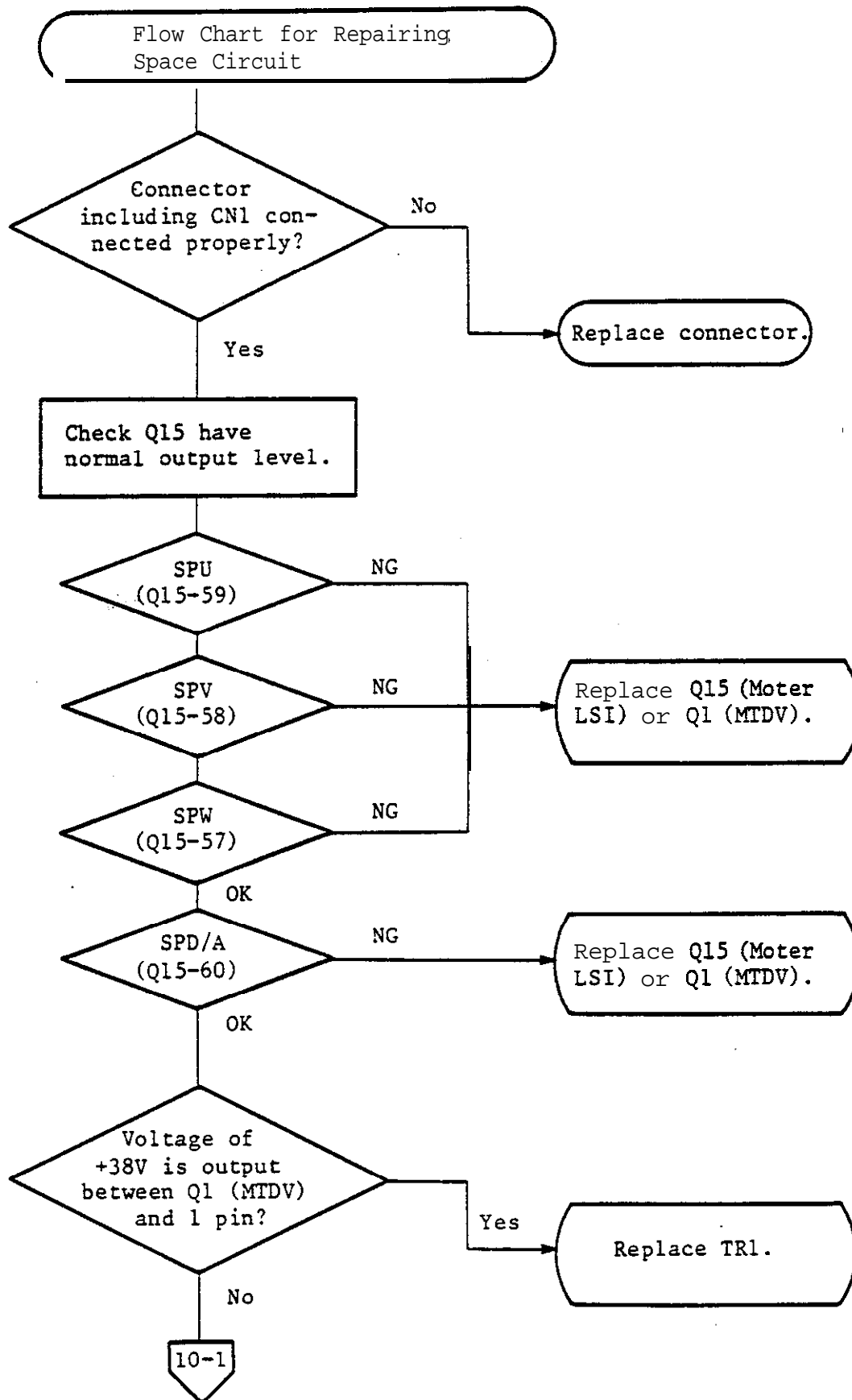


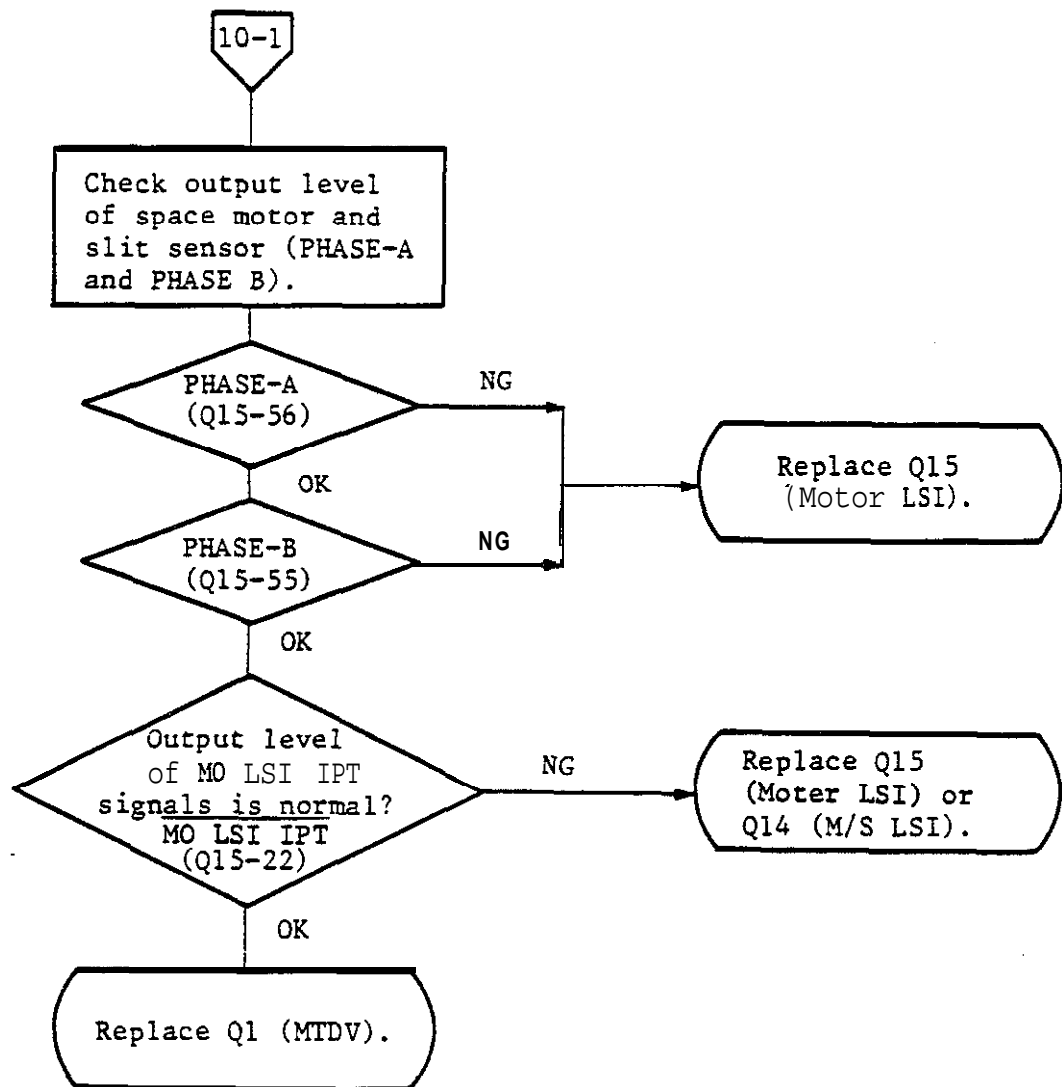


⑨



⑩



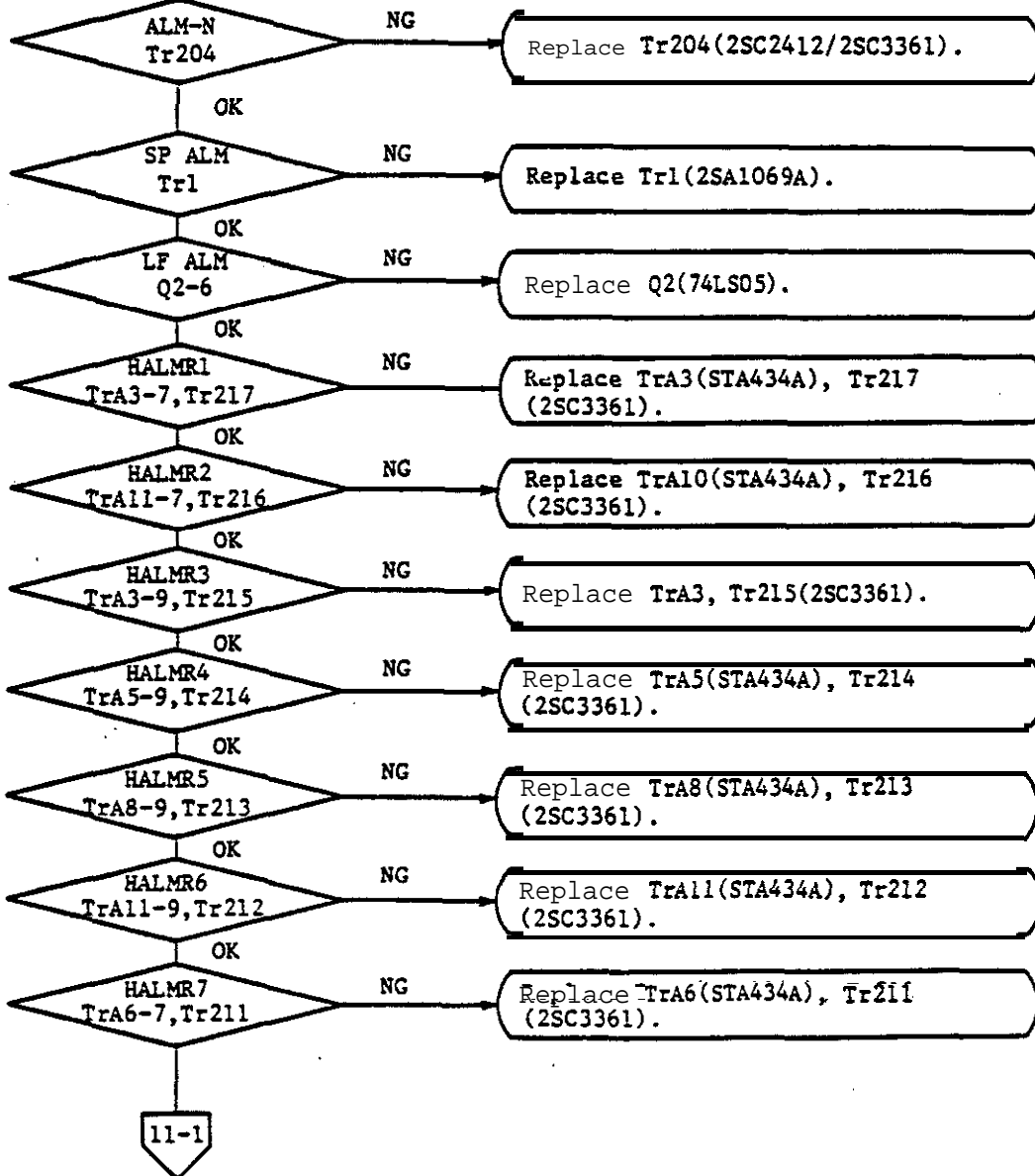


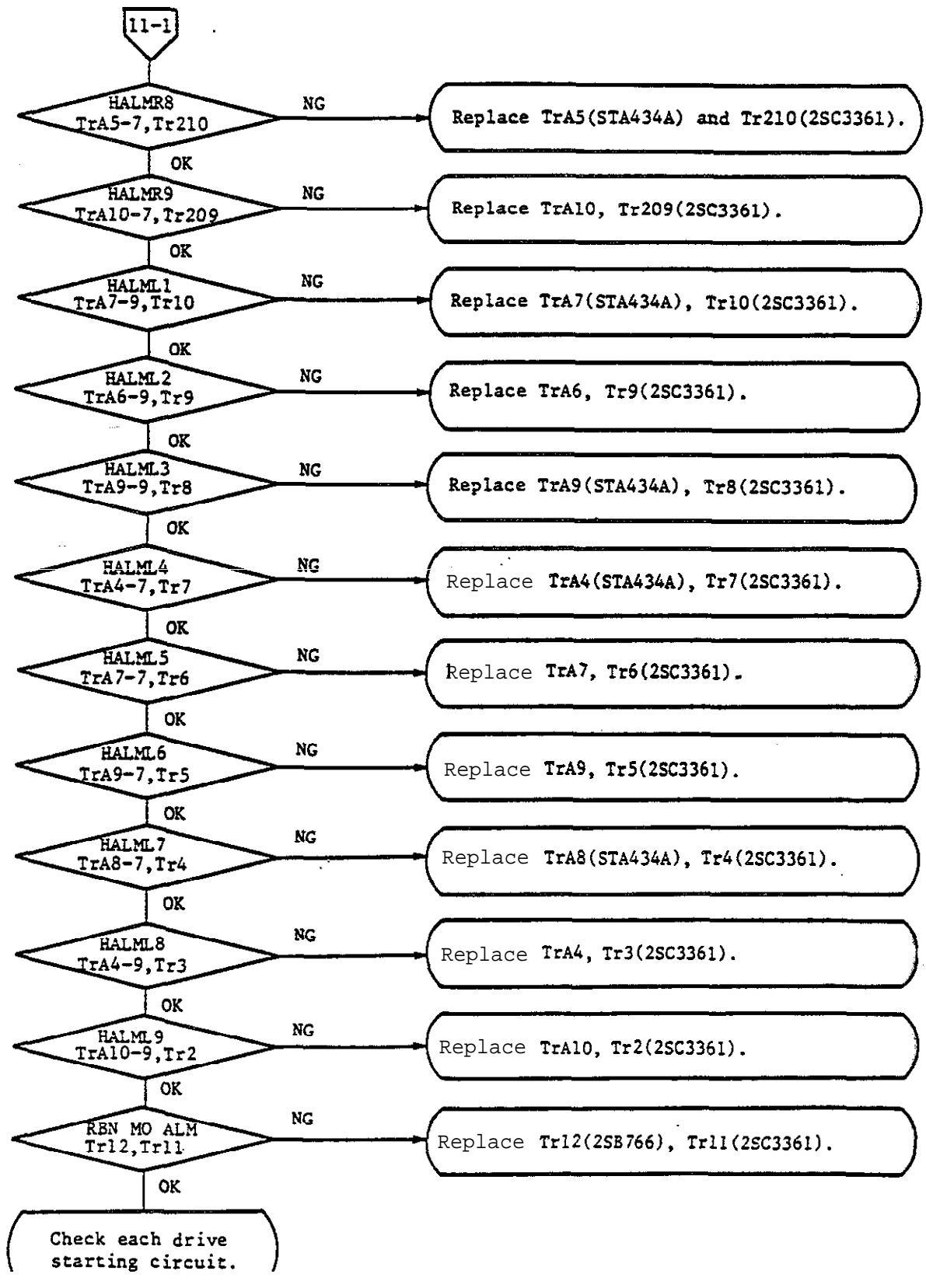
⑪

Flow Chart for Repairing Alarm Circuit

Check each drive alarm circuit of demounted main control PCB.

* Make judgement by checking I/O level of Tr and TrA.





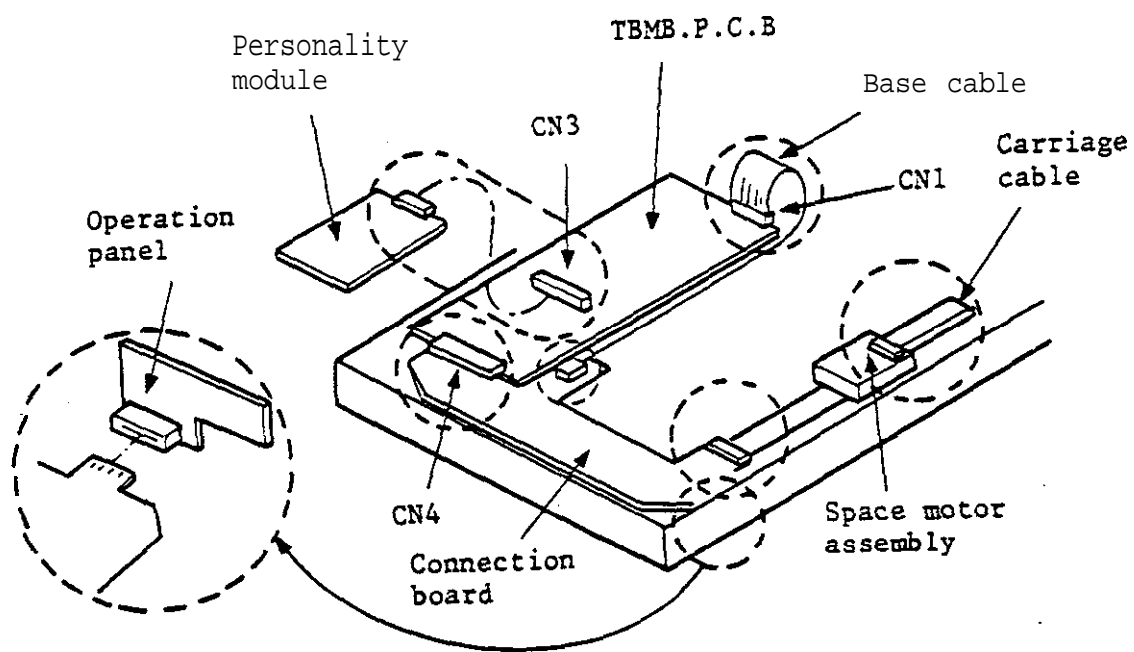
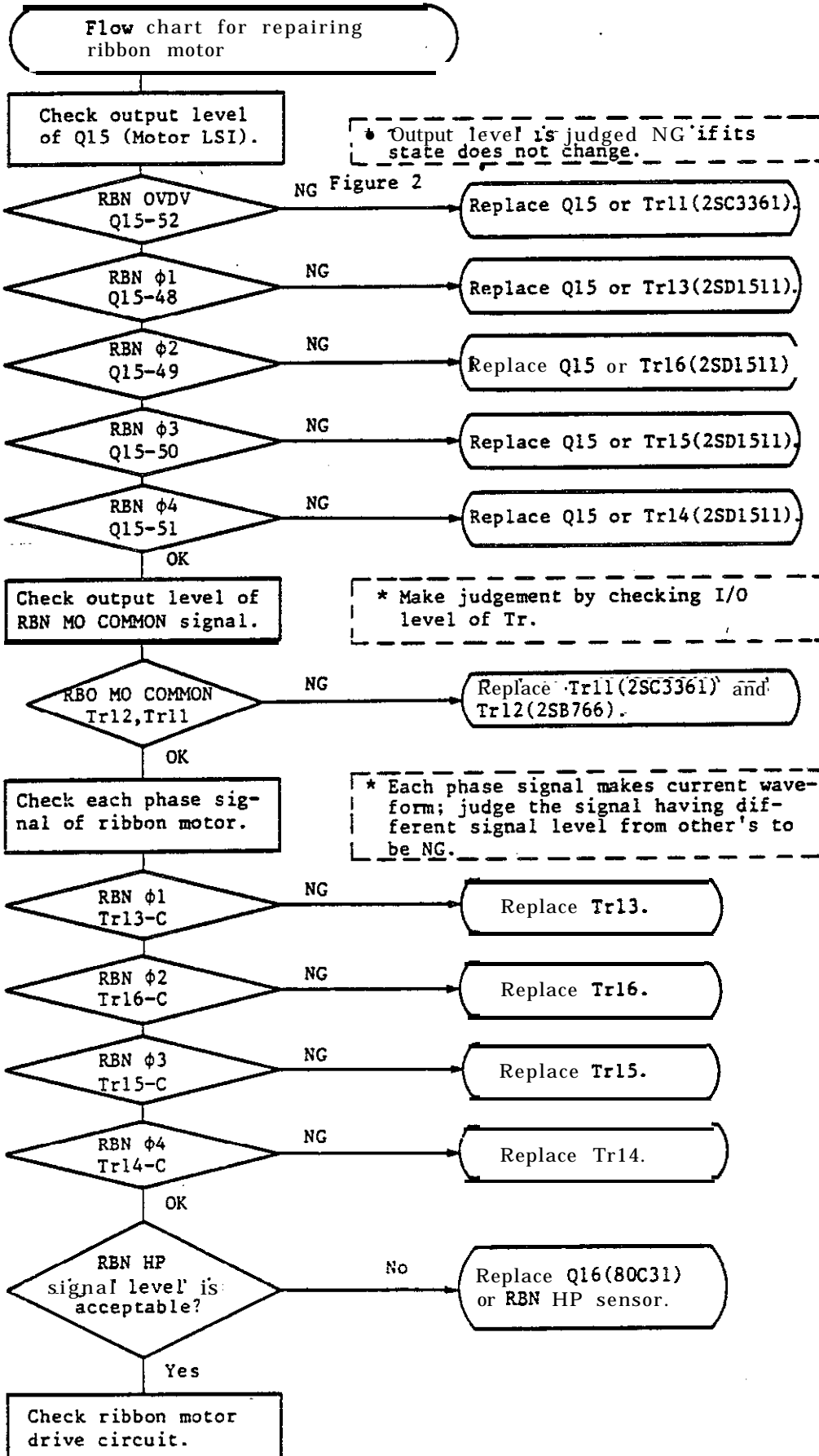
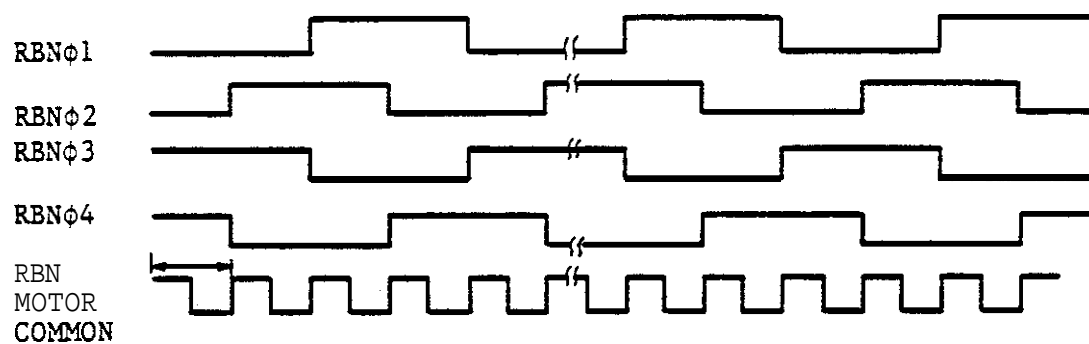


Figure 1

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(1) Ribbon motor drive (**color** change)



(2) Ribbon motor drive (feed)

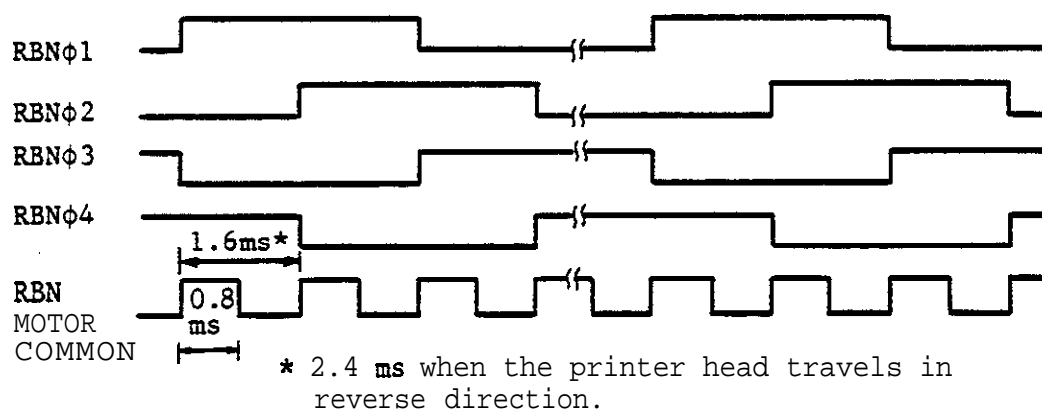
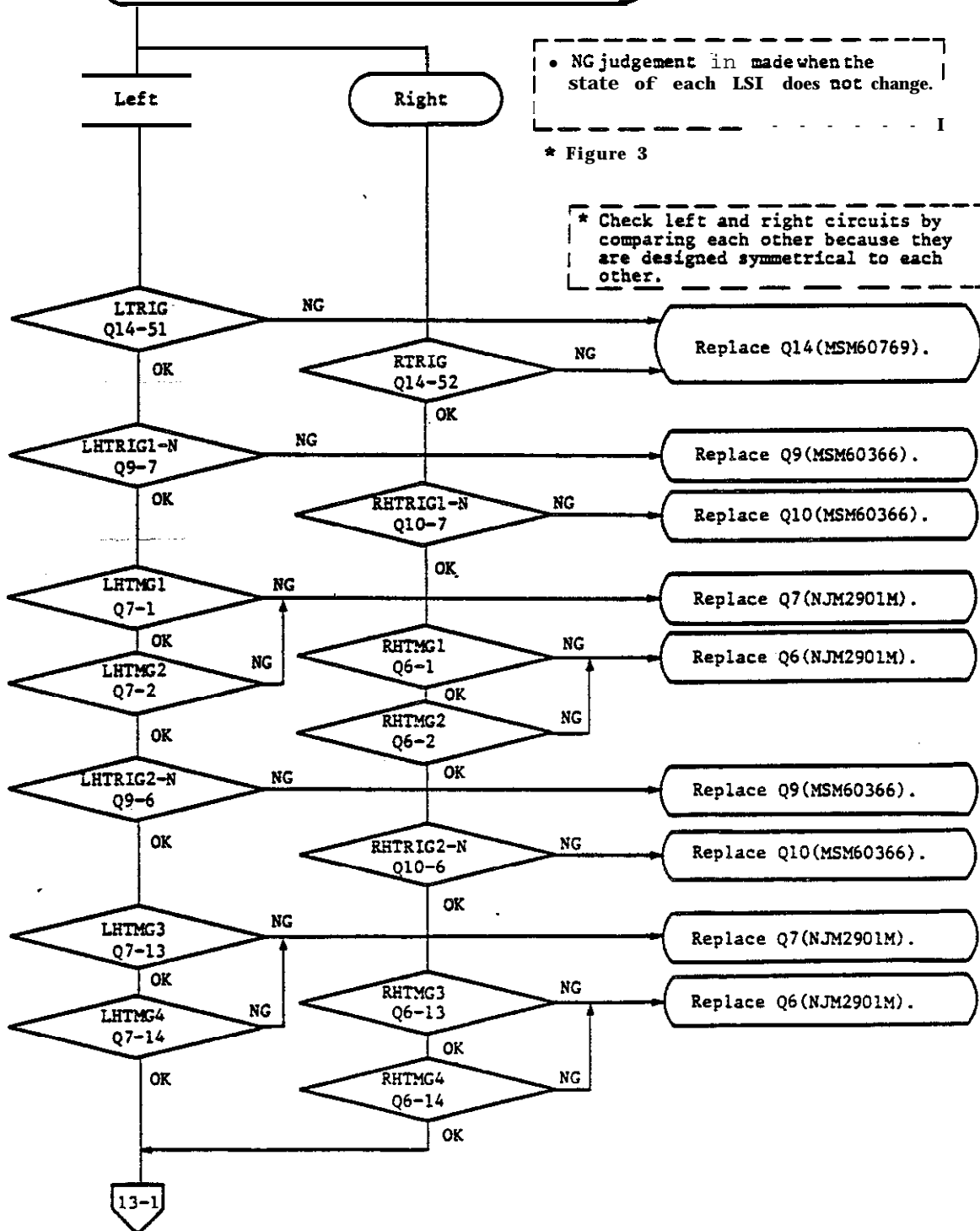


Figure 2

⑬

Flow Chart for Repairing Head Drive



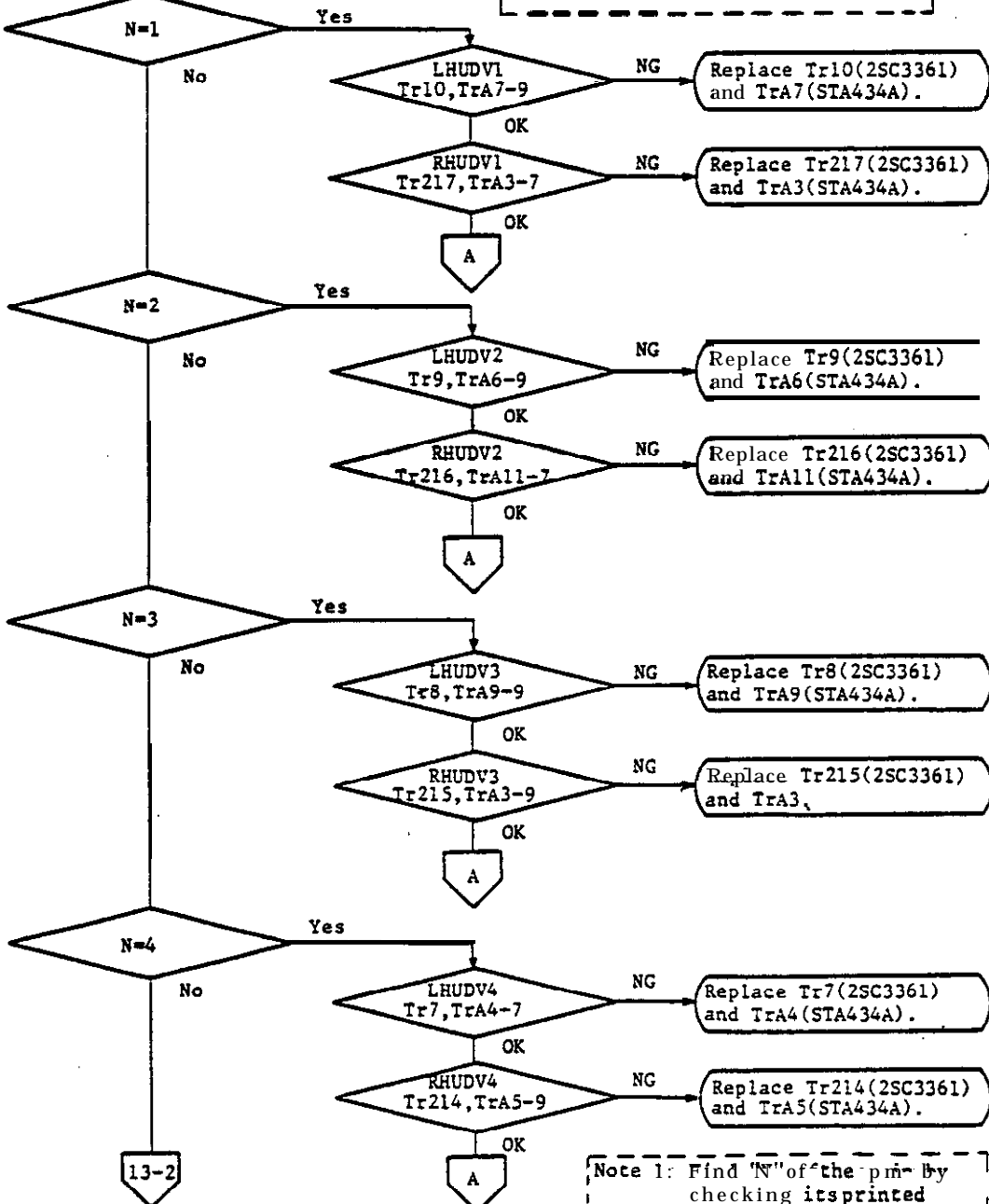
13-1

Make sure which pin counted from the top causes misprinting and dot missing.

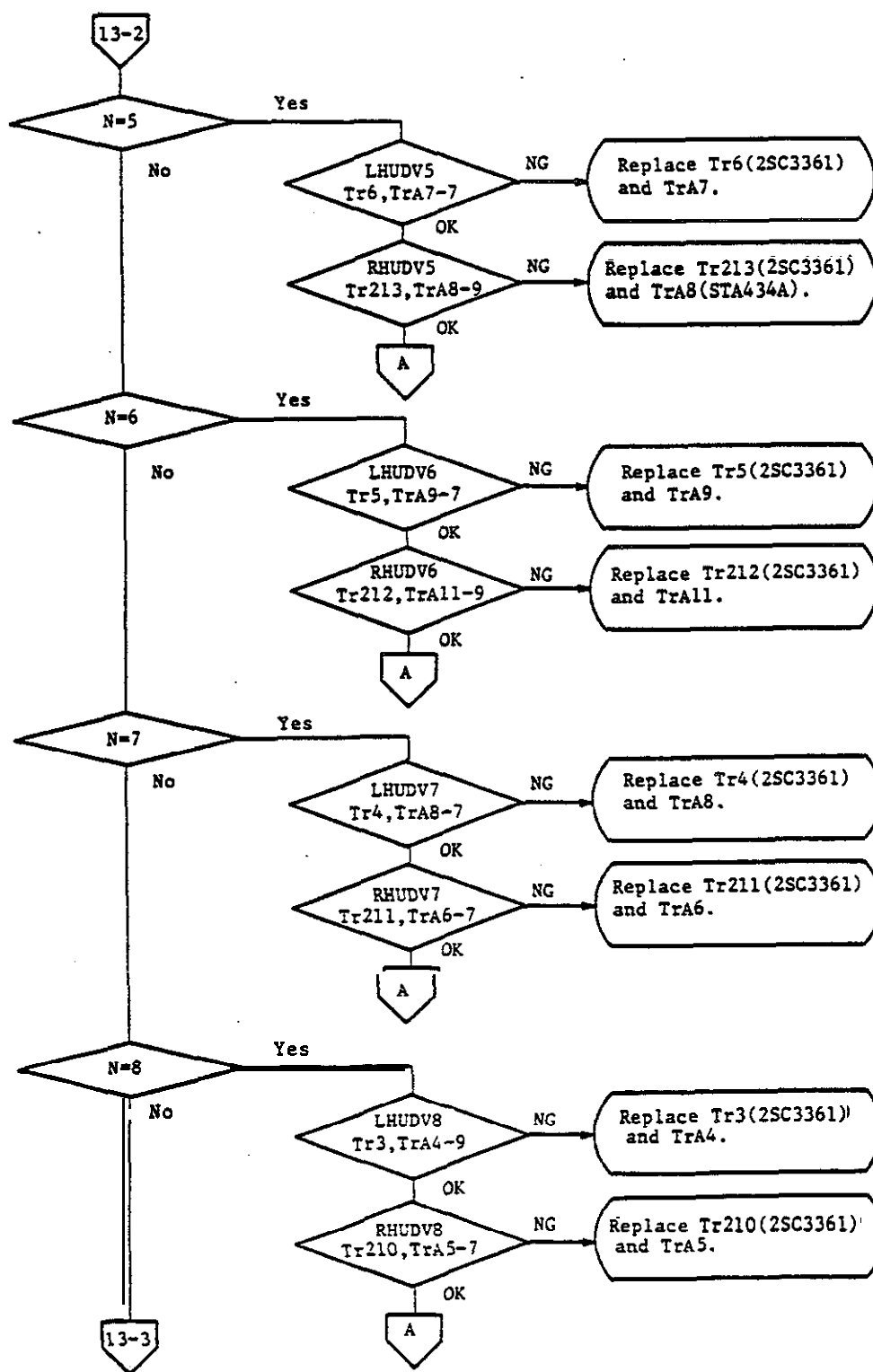
(Note 1)

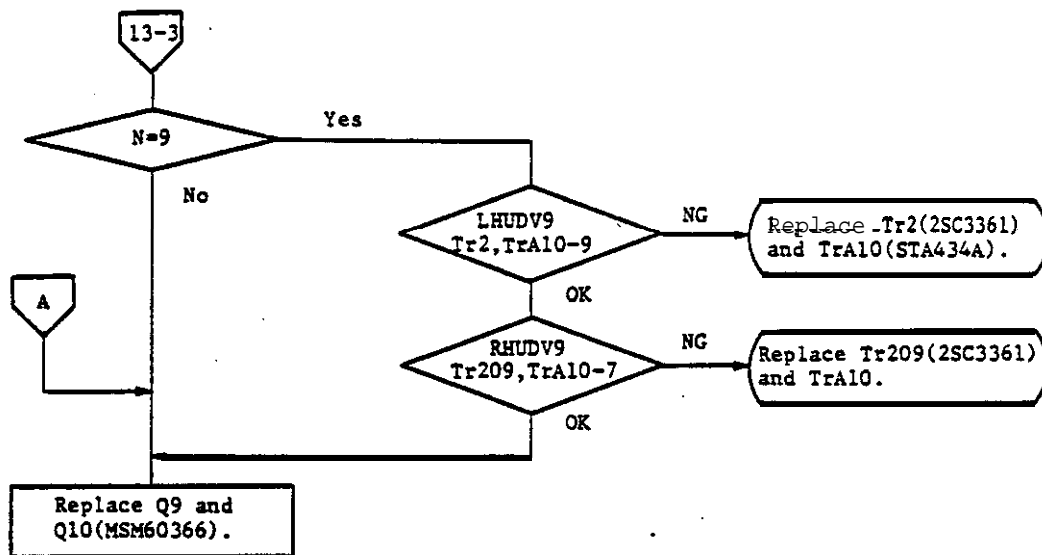
Counted N from the top

• Make judgement by checking 110 level of Tr.



Note 1: Find "N" of the pin by checking its printed character.





Misprinting or
dot missing

What type
of symptom?

In terms of
character

Defective person-
ality module or
interface cable

In terms of
horizontal dot

Contact of carriage
cable and base
cable compressed
each other, or
defective head

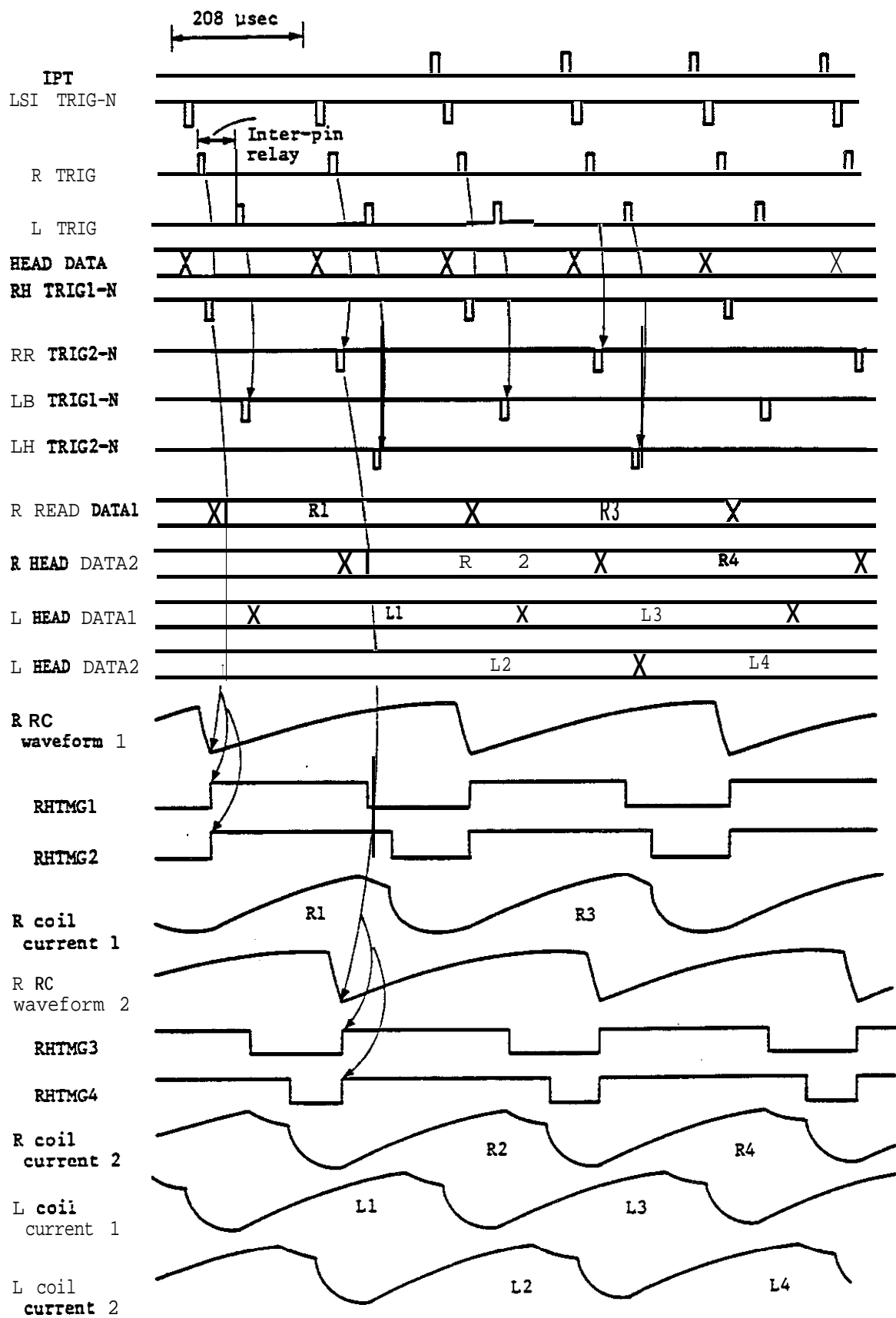
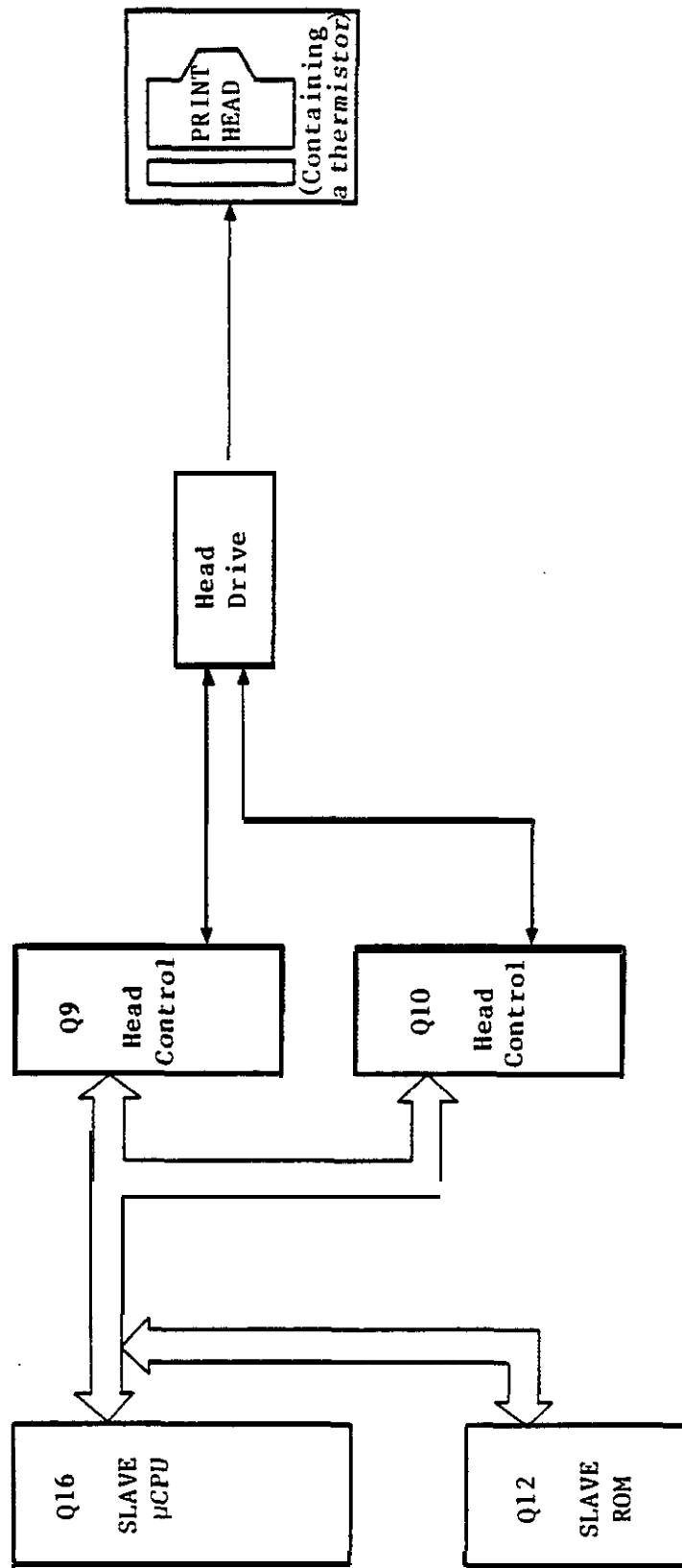


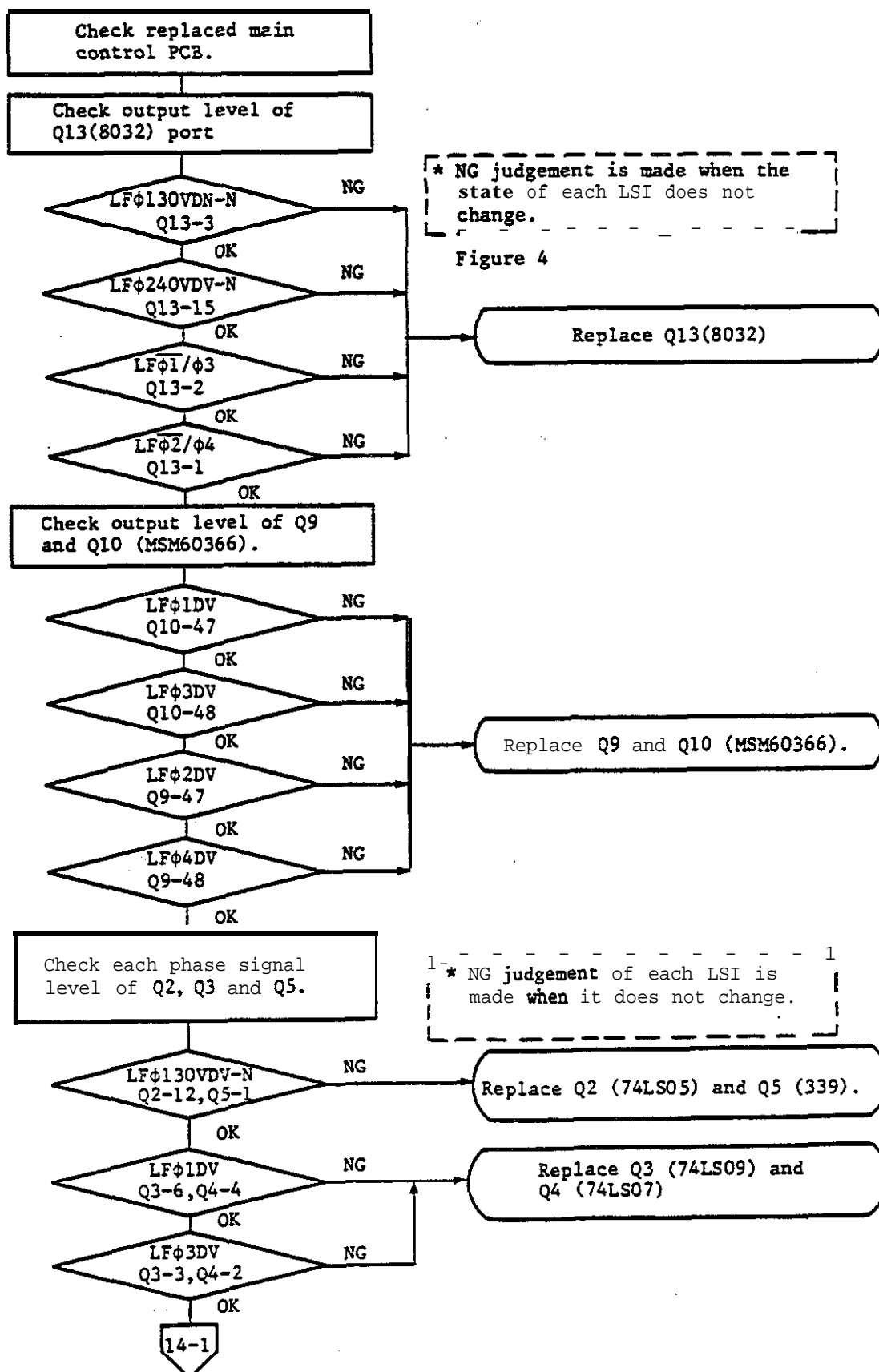
Figure 3

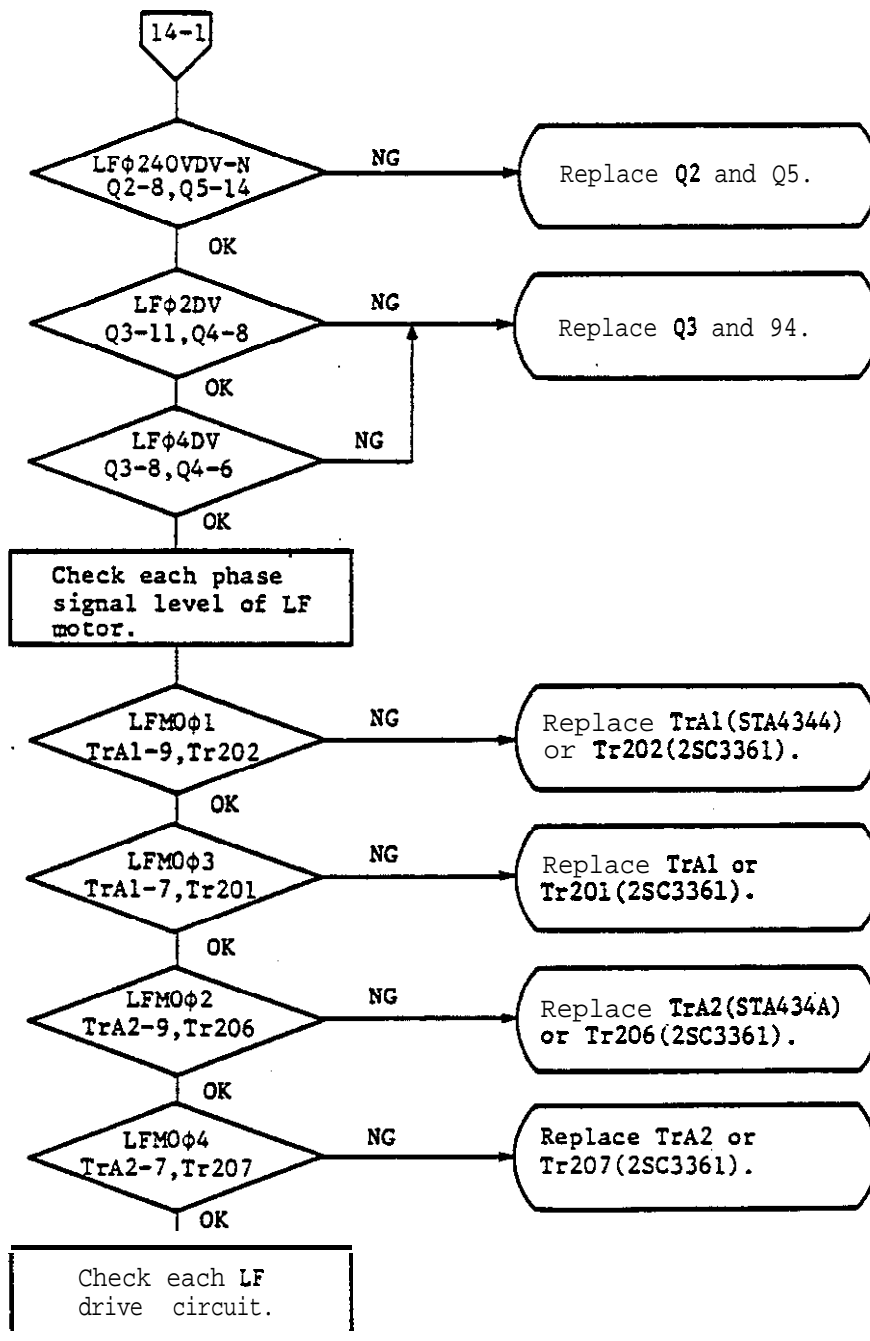


Head Drive Block Diagram

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Flow Chart for Repairing Line Peed





Line feed

The LF motor during being stopped is locked by **+9V** voltage.

The LF motor is driven, during line feed operation, by being applied with **+35V** by the signals of **LF ϕ 130VDV-N** and **LF ϕ 240VDV-N**.

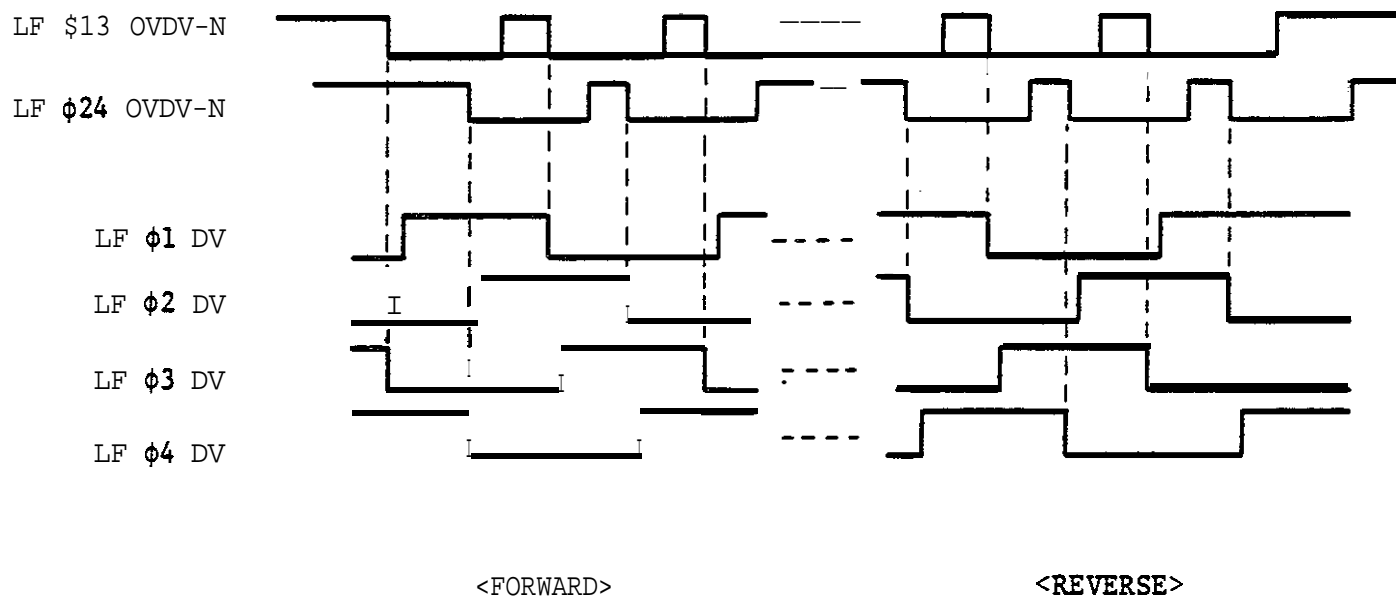


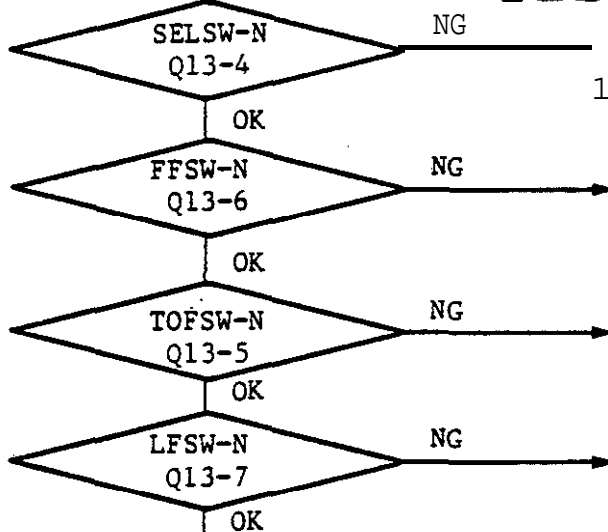
Figure 4

15

Flow Chart for Repairing Operation Panel

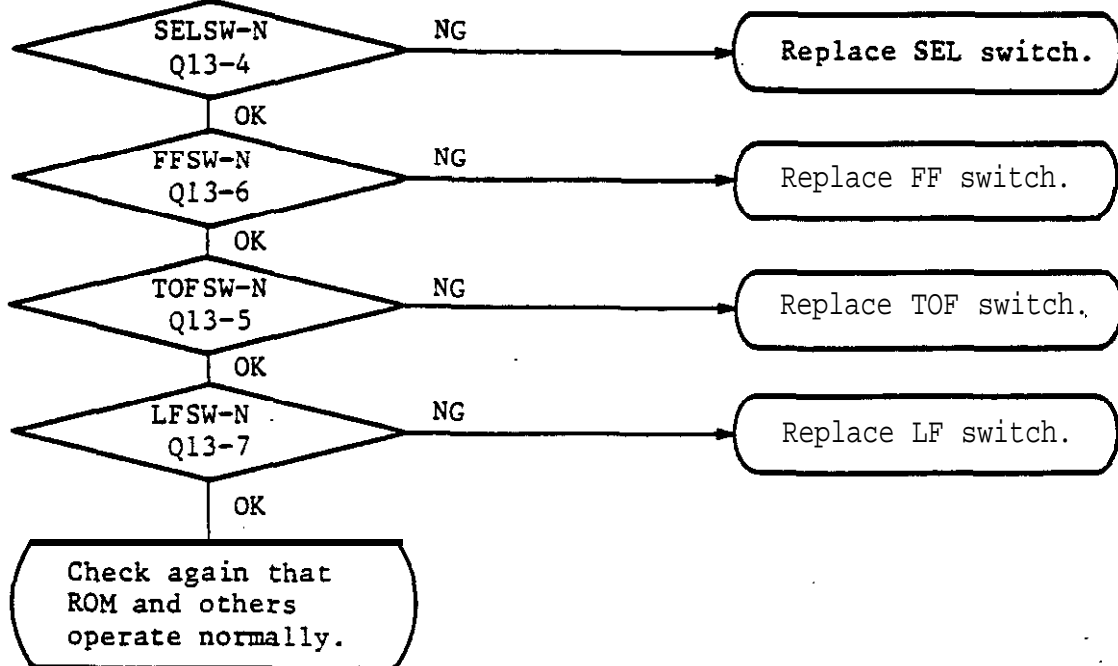
Check input level of Q13 (8032) Port-1 when switch is open.

* Each phase level should be within the range of 2.0 v to 5.5 v.

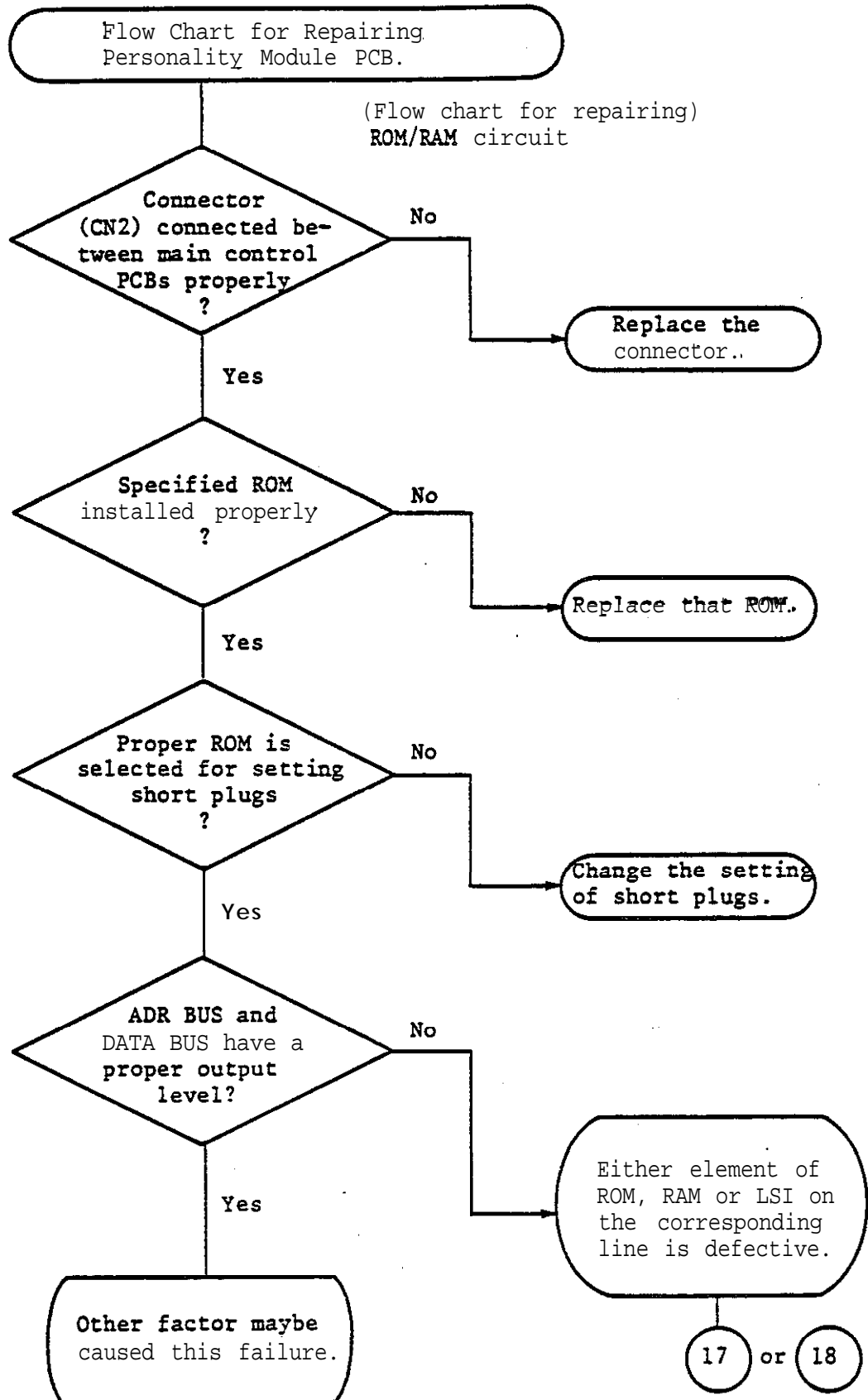


Check output level when switch is depressed.

* Each phase level should be 0.45 V or less.

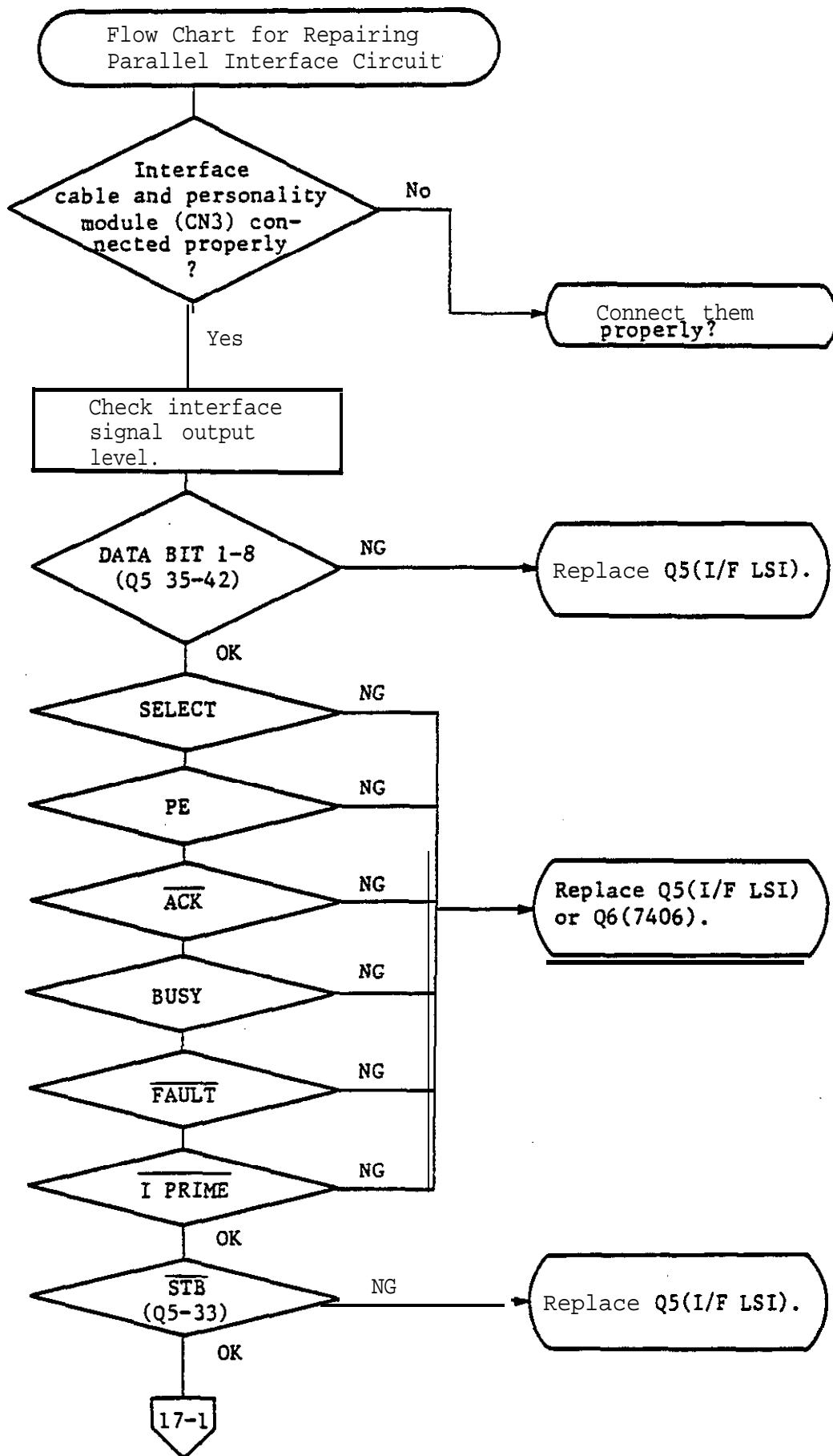


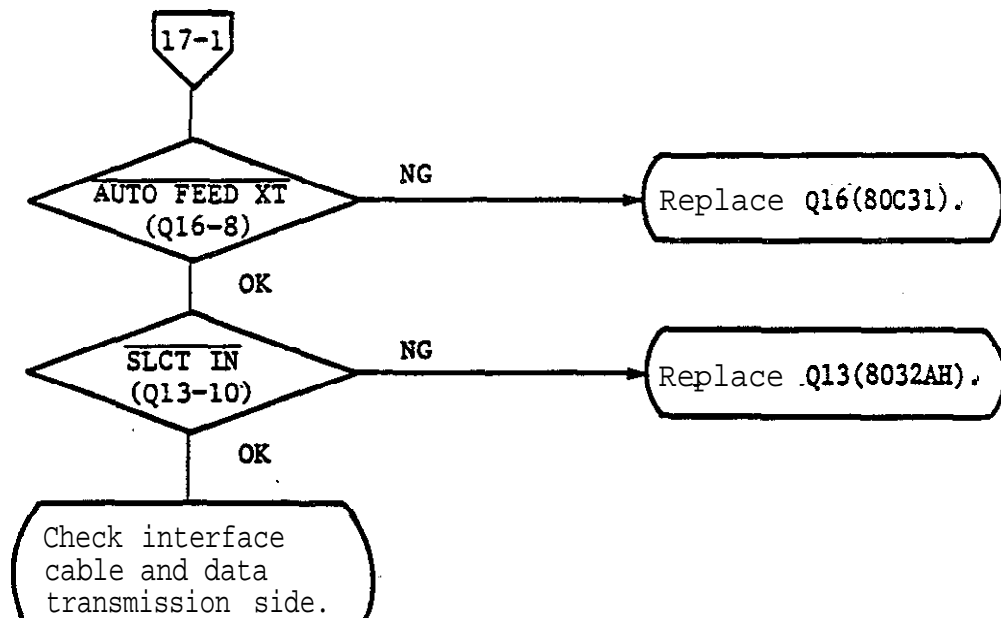
①⑥



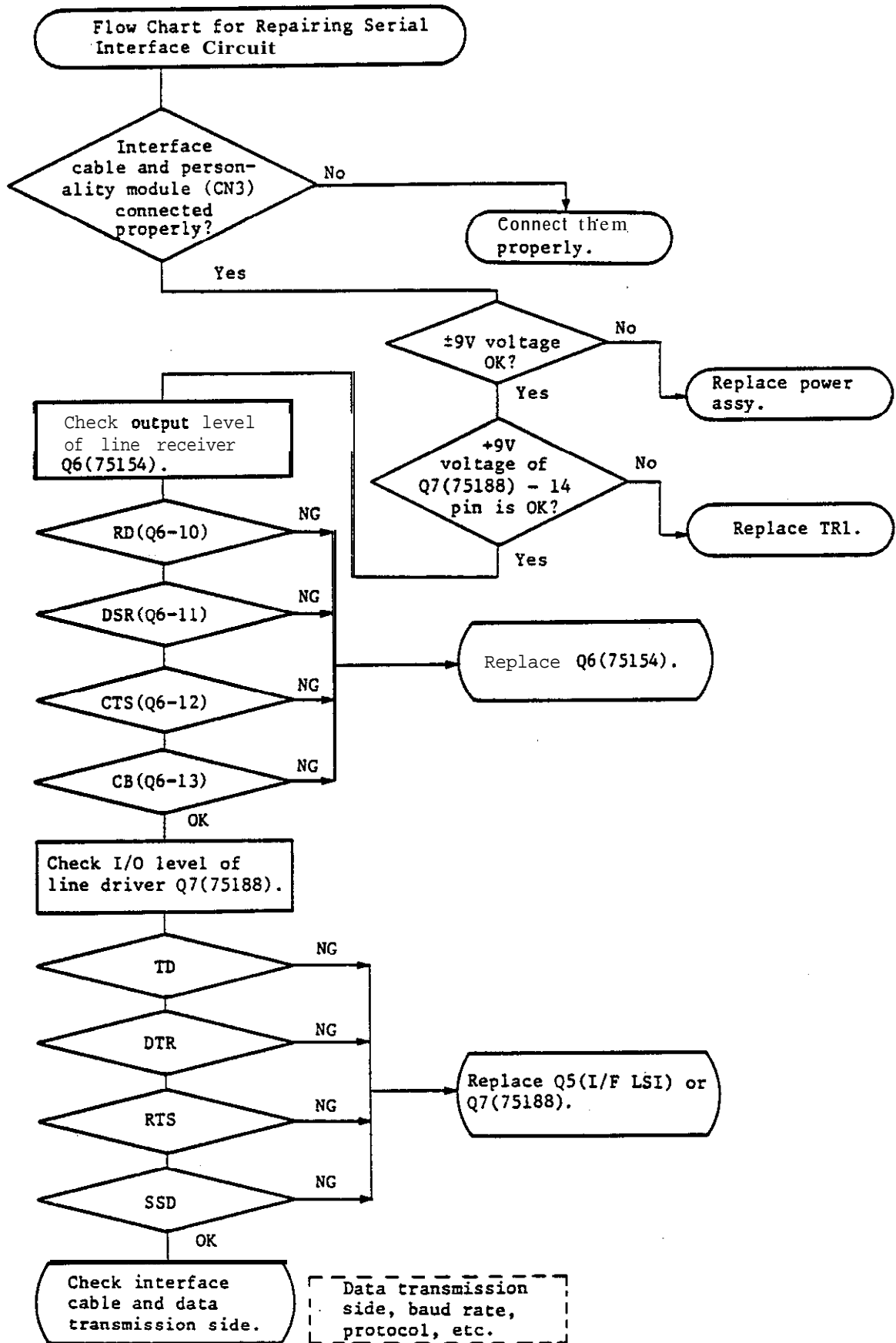
* Depending on that the interface is parallel or serial

①7

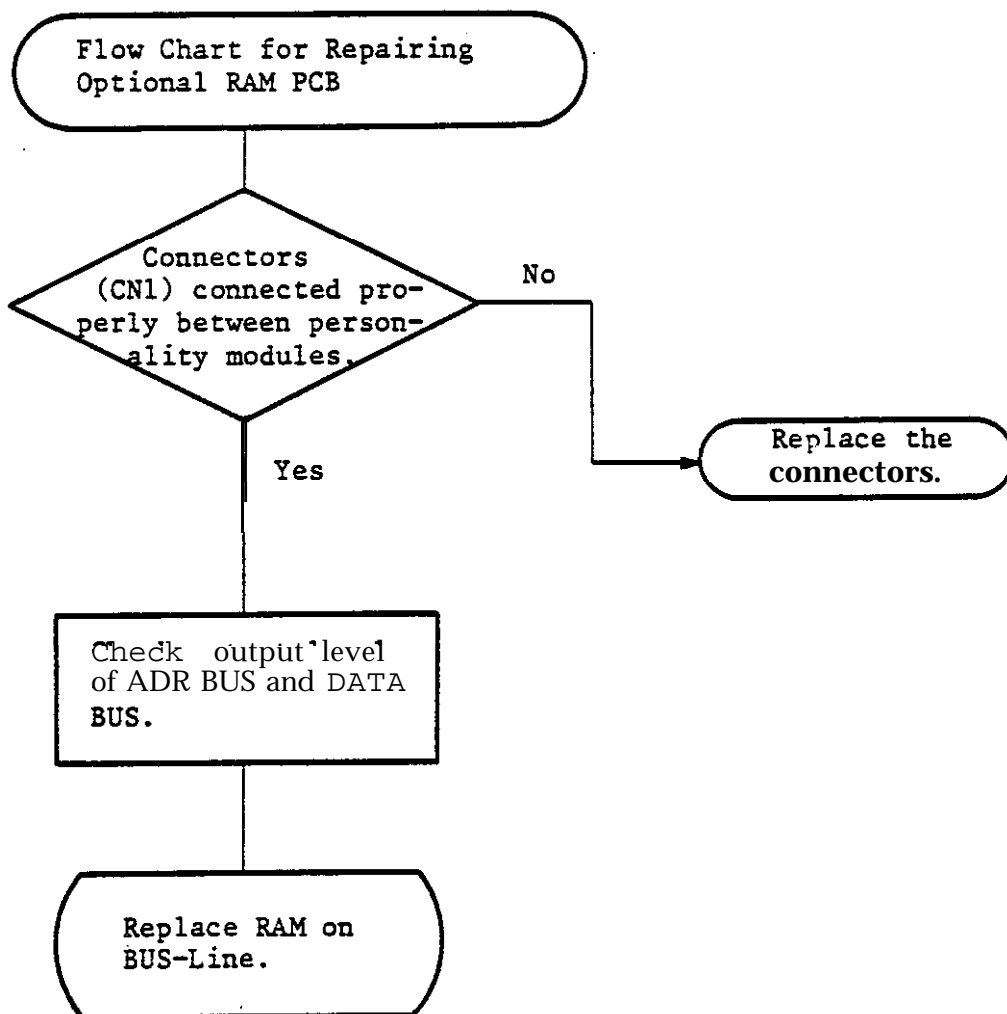


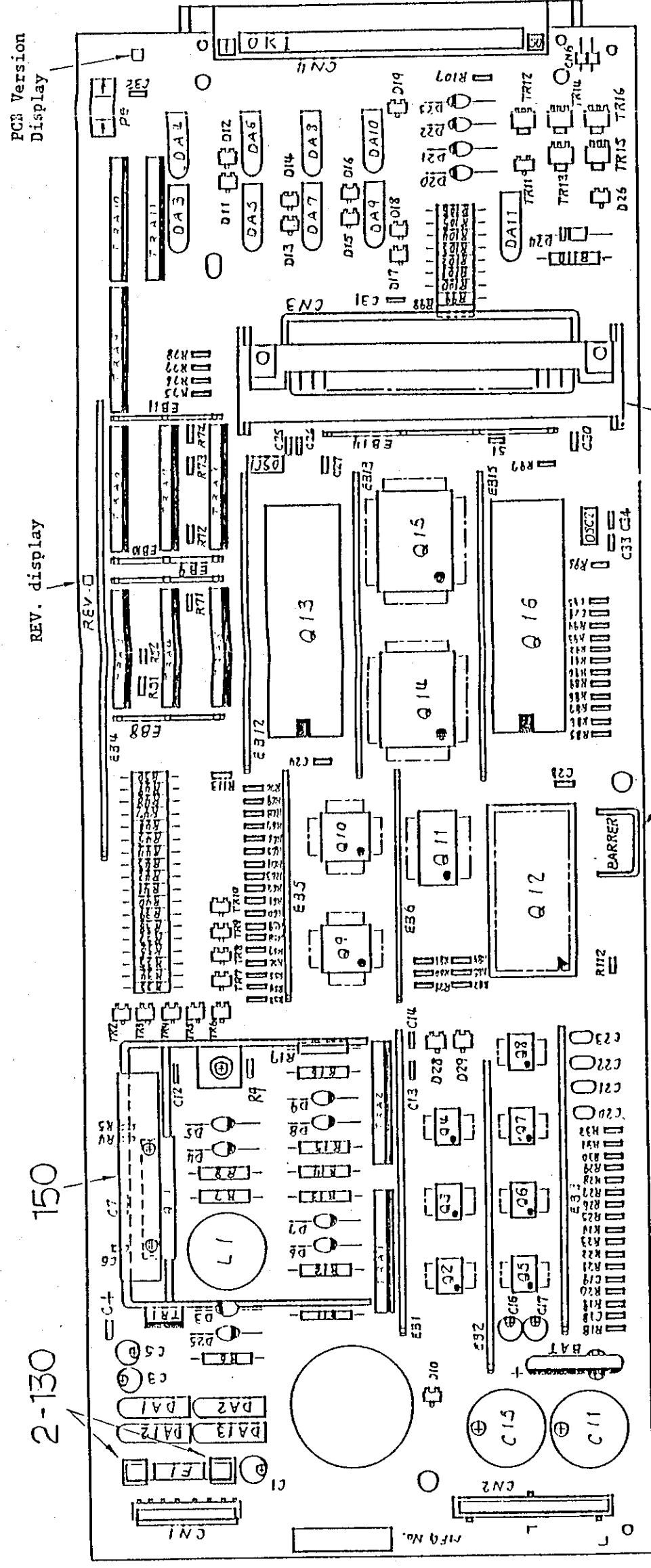


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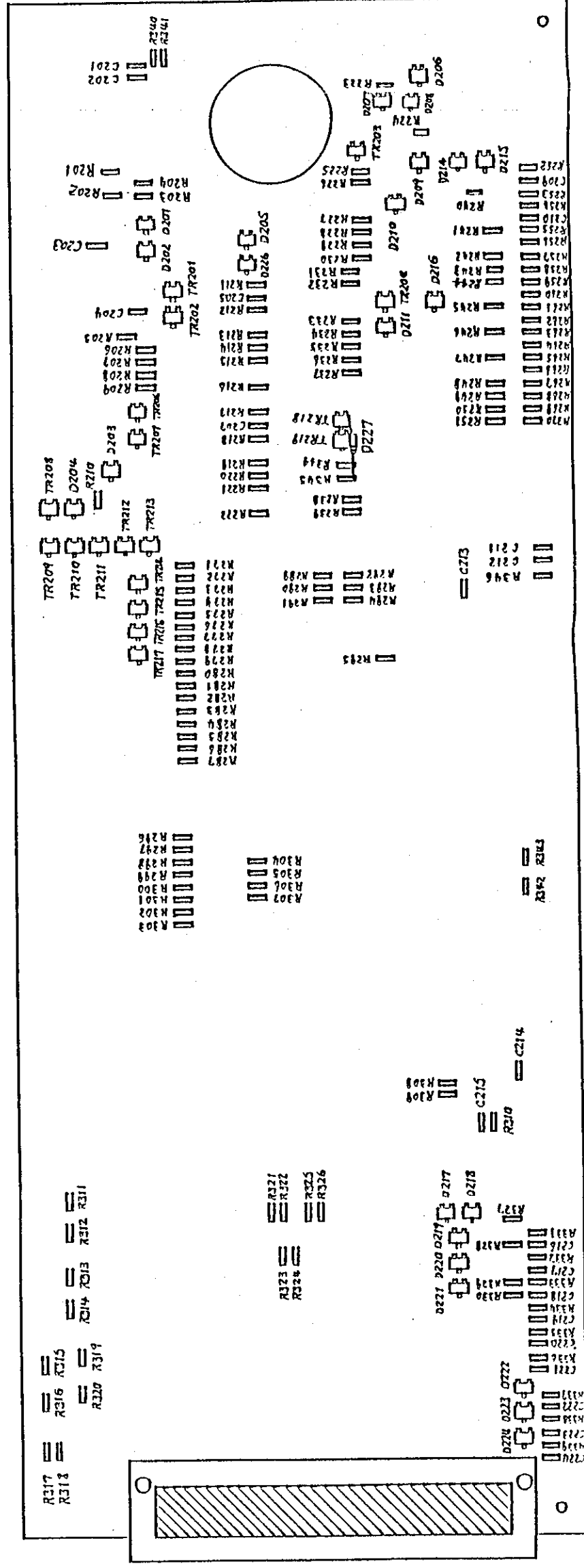
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134, 2-135

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| | |
|-------------|------------|
| Rev. No. | 1 |
| PCB version | 4 or later |

TBMB-PCB

(4YA4042-1141G1)1/2

COMPONENT PARTS LIST

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (1/7) REV. 1
PCB version 4 or subsequent versions

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|--|----------------|------|---------|
| 1 | D24 | RD39F-B Zener DI | 613A2232L0322 | 1 | |
| 2 | D206 | MA3047-M/RD4.7M-B2 Zener DI (CP) | 613A0103M0102B | 1 | |
| 3 | D201 | MA3100/RD10M-B Zener DI (CP) | 613A0103M0182 | 1 | |
| 4 | D211 | MA3120 Zener DI (CP) | 613A0291M0202 | 1 | |
| 5 | D202 | MA3300/RD30M-B Zener DI (CP) | 613A0103M0292 | 1 | |
| 6 | D10-19,203-205, 207-209,214-216, 226 | MA151WK/DAN202K Signal DI (CP) | 611A0003N0003 | 20 | |
| 7 | D3 | DFAlA1 Rectification DI | 610A0221L0021 | 1 | |
| 8 | D4-9,20-23,25 | EM12/SM-1A-02/DSAlA2 Rectification DI | 610A0003M0001 | 11 | |
| 9 | D26,28,29,210, 217-224 | MA152WA Signal DI (CP) | 611A0029M0002 | 12 | |
| 10 | DA1,4,6,8,10,11, 12 | D1CA20 Diode array | 761A2232M0401 | 7 | |
| 11 | DA2,3,5,7,9,13 | D1CA20R Rectification diode | 610A3027M0001 | 6 | |
| 12 | D227 | 1S953/1S2075K/1S2473 Signal DI | 611A0003L0001 | 1 | |
| 13 | R227,228 | RM73B2B510J RN resistance (CP) | 323A5015J0510 | 2 | |
| 14 | R323 | RM73B2B221J RN resistance (CP) | 323A5015J0221 | 1 | |
| 15 | R231,232 | RM73B2B154J RN resistance (CP) | 323A5015J0154 | 2 | |
| 16 | R317,324 | RM73B2B431J RN resistance (CP) | 323A5015J0431 | 2 | |
| 17 | R18,212,218,258 | RM73B2B511J RN resistance (CP) | 323A5015J0511 | 4 | |
| 18 | R211,217 | RM73B2B392J RN resistance (CP) | 323A5015J0392 | 2 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (2/7) REV. 1
PCB version 4 or subsequent versions

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|-----------------------------------|---------------|------|---------|
| 19 | R9,51,52,62-78, 89,96,113,203, 210,215,216,221, 222,224,225,236- 240,252,280-287, 304-307,311-316, 319,320,340,341, 343 | RM73B2B102J Resistance (CP) | 323A5015J0102 | 60 | |
| 20 | R107,213,219 | RM73B2B122J RN resistance (CP) | 323A5015J0122 | 3 | |
| 21 | R19 | RM73B2B202J RN resistance (CP) | 323A5015J0202 | 1 | |
| 22 | R95,204,243, 327-330 | RM73B2B222J RN resistance (CP) | 323A5015J0222 | 7 | |
| 23 | R205,254 | RM73B2B332J RN resistance (CP) | 323A5015J0332 | 2 | |
| 24 | R214,220 | RM73B2B472J RN resistance (CP) | 323A5015J0472 | 2 | |
| 25 | R29-32,88,112, 234,235,260,262, 264,266,296-303, 321,322,325,326, 342,346 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 26 | |
| 26 | R53-61,206-209, 256,271-279,310 | RM73B2B562J RN resistance (CP) | 323A5015J0562 | 24 | |
| 27 | R255 | RM73B2B752J RN resistance (CP) | 323A5015J0752 | 1 | |
| 28 | R85-87,90-94,97, 253,295,308,309, 344 | RM73B2B103J RN resistance (CP) | 323A5015J0103 | 14 | |
| 29 | R241 | RM73B2B123J RN resistance (CP) | 323A5015J0123 | 1 | |
| 30 | R229,230,345 | RM73B2B203J RN resistance (CP) | 323A5015J0203 | 3 | |
| 31 | R233,202 | RM73B2B223J RN resistance (CP) | 323A5015J0223 | 2 | |
| 32 | R318 | RM73B2B333J RN resistance (CP) | 323A5015J0333 | 1 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (3/7) REV. 1
PCB version 4 or subsequent versions

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------------------------|---|---------------|------|---------|
| 33 | R223,226,331-339 | RM73B2B124J RN resistance (CP) | 323A5015J0124 | 11 | |
| 34 | R201 | RM73B2B224J RN resistance (CP) | 323A5015J0224 | 1 | |
| 35 | R267-270 | RM73B2B511F RN resistance (CP) | 323A5015F0511 | 4 | |
| 36 | R259,265 | RM73B2B302F RN resistance (CP) | 323A5015F0302 | 2 | |
| 37 | R4,5,20,257 | RM73B2B242F RN resistance (CP) | 323A5015F0242 | 4 | |
| 38 | R261,263 | RM73B2B272F RN resistance (CP) | 323A5015F0272 | 2 | |
| 39 | R21,27,81,82,291, 294 | RM73B2B332F RN resistance (CP) | 323A5015F0332 | 6 | |
| 40 | R24,26 | RM73B2B392F RN resistance (CP) | 323A5015F0392 | 2 | |
| 41 | R80,83,289,293 | RM73B2B472F RN resistance (CP) | 323A5015F0472 | 4 | |
| 42 | R79,84,290,292 | RM73B2B123F RN resistance (CP) | 323A5015F0123 | 4 | |
| 43 | R244,247 | RM73B2B163F RN resistance (CP) | 323A5015F0163 | 2 | |
| 44 | R245,246,248-251 | RM73B2B363F RN resistance (CP) | 323A5015F0363 | 6 | |
| 45 | R22,28 | RM73B2B303F RN resistance (CP) | 323A5015F0303 | 2 | |
| 46 | R23,25,242 | RM73B2B223F RN resistance (CP) | 323A5015F0223 | 3 | |
| 47 | R7,8 | RSS1-68 Ω J RS resistance | 324A1012J0680 | 2 | |
| 48 | R110 | RD1/2Y2. 2K Ω J RD resistance | 321A1431J0222 | 1 | |
| 49 | R11,13,14,16,17 | RD1/2Y3. 9K Ω J RD resistance | 321A1431J0392 | 5 | |
| 50 | R98-106 | RD1/4Y5. 1K Ω J RD resistance | 321A1421J0512 | 9 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (4/7) REV. 1
PCB version 4 or subsequent versions

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------------------------|--|----------------|------|---------|
| 51 | R33-50 | RD1/4Y7. 5K Ω J RD resistance | 321A1421J0752 | 18 | |
| 52 | R6,12,15 | RNS1-0. 51 Ω J RS resistance | 324A1012J0518 | 3 | |
| 53 | C33,34 | TCC45SL1H220JYA 50V CC capacitor 22P | 302A1024K0220 | 2 | |
| 54 | C7,201,202 | CK3216B1H102K CK capacitor (CP) | 303A6009K3102 | 3 | |
| 55 | C203,205,207 | CK3216B1H103K CK capacitor (CP) | 303A6009K3103 | 3 | |
| 56 | C6,12-14,18,19, 24-32,209-224 | CK3216F1H104Z CK capacitor (CP) | 303A6009Z3104 | 31 | |
| 57 | C1 | CEUSM1J330 63V CE capacitor 33 μ | 304A1041J1330 | 1 | |
| 58 | C3,16,17 | CEUSM1H4R7 50V CE capacitor 4.7 μ | 304A1041H1479 | 3 | |
| 59 | C5 | CEUSM1H100 50V CE capacitor 10 μ | 304A1041H1100 | 1 | |
| 60 | C204 | CC3216SL1H220J CC capacitor (CP) | 303A3008K0220 | 1 | |
| 61 | C4 | CK92F1H104ZY 50V CK capacitor 0.1 μ | 303A0420Z3104 | 1 | |
| 62 | C11,15 | CEUSM1H102 50V CE capacitor 1000 μ | 304A1041H1102 | 2 | |
| 63 | C20-23 | CQM92PP1H103F 50V CQ capacitor 0.01 μ | 306A4100F1103 | 4 | |
| 64 | Q13 | P8032AH MOS-CPU | 851A2152M0011 | 1 | |
| 65 | Q15 | MSM61048GS-VK MOS digital IC (FP) | 702A4924F0020 | 1 | |
| 66 | Q14 | MSM60769GS-VK MOS digital IC (FP) | 702A4924F7069V | 1 | |
| 67 | Q1 | HA13412 BIP linear system IC | 720A4021E0004 | 1 | |
| 68 | Q11 | MSM5128-20GS-VK (Special) MOS-S-RAM (SO) | 804A0024N4302Y | 1 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (5/7) REV. 1
PCB version 4 or subsequent versions

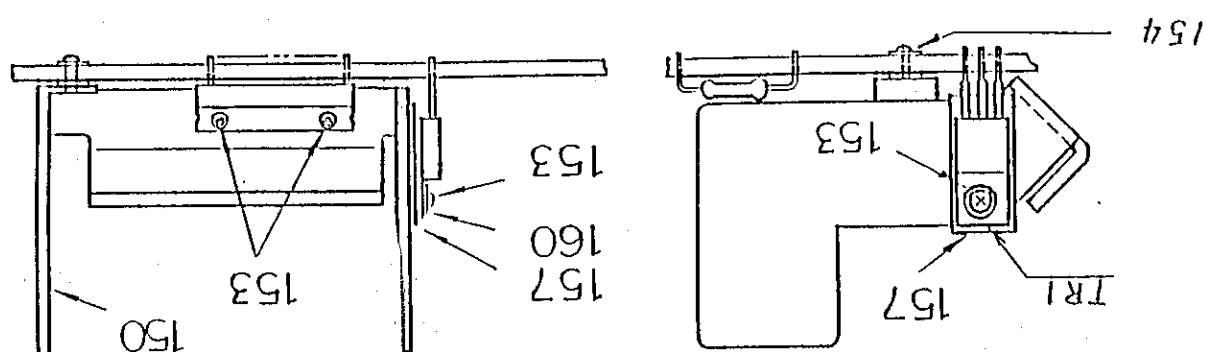
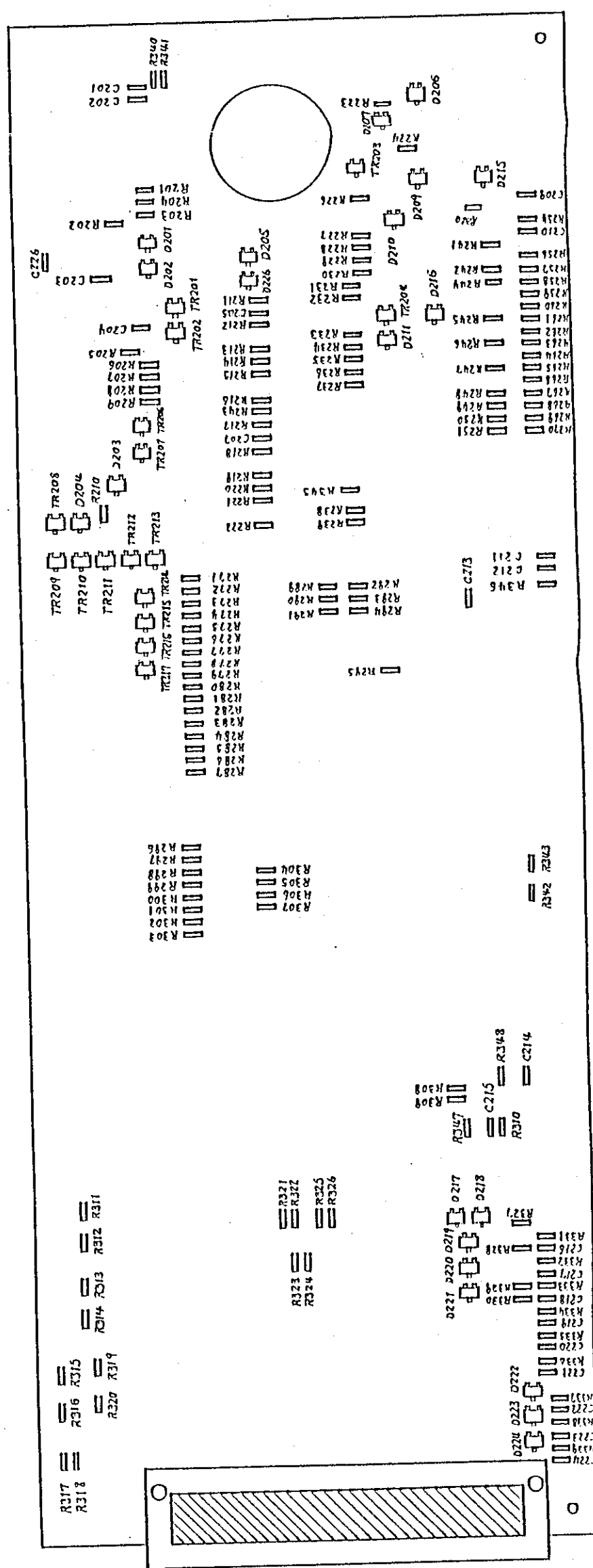
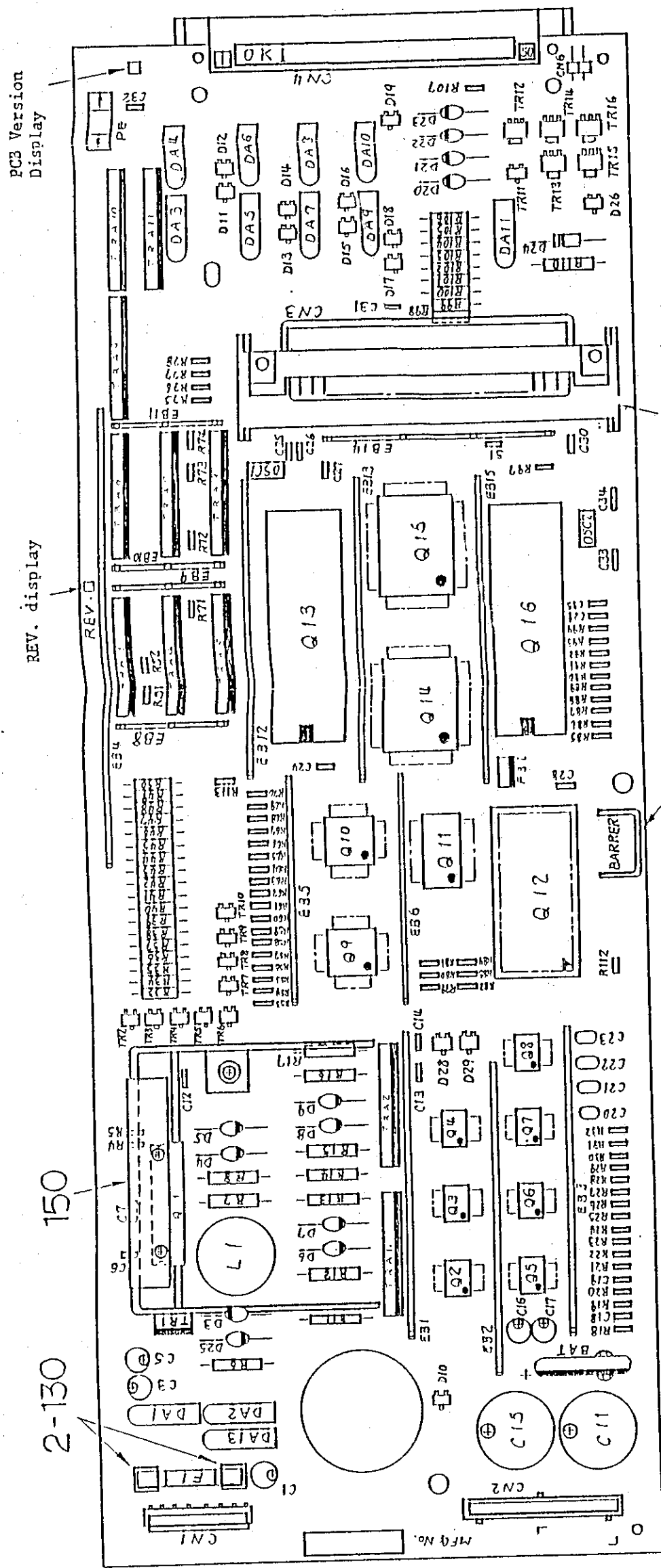
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------------------|--|----------------|------|---------|
| 69 | Q2,8 | SN74LS05NS BIP digital IC (SO) | 700A0550N0005 | 2 | |
| 70 | Q5-7 | NJM2901M BIP linear system IC (SO) | 720A0528N0002 | 3 | |
| 71 | Q4 | SN74LS07NS BIP digital IC (SO) | 700A0550N0007 | 1 | |
| 72 | Q3 | SN74LS09NS BIP digital IC (SO) | 700A0550N0009 | 1 | |
| 73 | Q16 | P80C31BH-1 MOS-CPU | 851A0152M0002 | 1 | |
| 74 | Q9,10 | MSM60366GS-VK MOS digital IC (FP) | 702A4924F3066V | 2 | |
| 75 | TR204 | 2SC3361/2SC2412K NPN-HF-TR (CP) | 602A1003N0002 | 1 | |
| 76 | TR2-11,201,202, 206-219 | 2SC3361 NPN-HF-TR (CP) | 602A1032N0002 | 26 | |
| 77 | TR12 | 2SB766A-Q/R PNP-LF-TR (CP) | 601A1130M0001 | 1 | |
| 78 | TR13-16 | 2SD1511 NPN-LF-TR (CP) | 603A1130N0003 | 4 | |
| 79 | TR203 | 2SA1331/2SA1037K PNP-HF-TR (CP) | 600A1003N0002 | 1 | |
| 80 | TR1 | 2SA1010 PNP-HF-TR | 600A1223M0001 | 1 | |
| 81 | TRA1-11 | STA434A Transistor array | 760A4726M0001 | 11 | |
| 82 | Q12 | DL2-28A-05 IC socket | 245A1155P0280 | 1 | |
| 83 | Q12 | ROM | 4YR4064-1217G1 | 1 | |
| 84 | S1 | MCR18-JPW Chip jumper (CP) | 323A5011P0001 | 1 | |
| 85 | CN4 | PD50A2X0 PC connector | 224A1160P0500 | 1 | |
| 86 | CN1 | ZC-014 PC connector | 224A3590P0140 | 1 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (6/7) REV. 1
PCB version 4 or subsequent versions

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------|--------------------------------------|----------------------|------|---------|
| 87 | CN2 | 1-172681-2 PC connector | 224A3462P0120 | 1 | |
| 88 | CN3 | 00-8272-244959762-06 PC connector | 224A3607P0440 | 1 | |
| 89 | CN6 | FFC-2TLAW1B PC connector | 225A3119P0020 | 1 | |
| 90 | L1 | OL1614-102KR70(C) H coil | 353A3002K0102 | 1 | |
| 91 | OSC1 | FAR-C4SB11059000-M02 Vibrator | 4LP-12186-1 | 1 | |
| 92 | OSC2 | CSA16.000MX2 Ceramic oscillator | 381A1101B2005 | 1 | |
| 93 | PE | EE-SJ5-B Photocoupler | 652A0127M0009 | 1 | |
| 94 | BAT | CR2430 Battery | 4LP-45478 | 1 | |
| 95 | | FP-213 Fuse holder | 4LP-7142 | 2 | |
| 96 | F1 | GG52-1/2 Fuse | 540A2036M1252 | 1 | |
| 97 | | Connector support bracket | 4PP4043- 1996P001 | 1 | |
| 98 | | P3055B Push rivet | 136A1180P0001 | 2 | |
| 99 | EB8,9-11 | Power bar | 4PP4044- 1632P001 | 4 | |
| 100 | EB3 | Power bar L=60. 96 P=15. 24 N=5 | 3LH-31313-4 | 1 | |
| 101 | EB14 | Power bar L=45. 72 P=15. 24 N=4 | 3LH-31313-5 | 1 | |
| 102 | EB5,6 | Power bar L=45. 72 P=45. 72 N=2 | 3LH-31313-85 | 2 | |
| 103 | EB1,2,12,13,15 | Power bar L=60. 96 P=30. 48 N=3 | 3LH-31313-96 | 5 | |
| 104 | EB4 | Power bar L=91. 44 P=30. 48 N=4 | 3LH-31313-86 | 1 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (7/7) REV. 1
 PCB version 4 or subsequent versions

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|--------------------------------|------------------------|------|---------|
| 105 | | Barrier | 4PP4044- 1698P001 | 1 | |
| 106 | | Heat sink | 4PP4044- 1695P001 | 1 | |
| 107 | | Screw (pan-head SW with 2W) | +P(SW+2W)2. 5-6-HHC | 3 | |
| 108 | | Screw (pan-head SW with W) | +P(SW+W)3-6- HHO | 1 | |
| 109 | | Thermal capacitor OB-6001 | 4LP-44106-3 | 1 | |
| 110 | | Insulation bush | 4LP-4967-8 | 1 | |



| | |
|-------------|---|
| Rev. No. | 2 |
| PCB version | 6 |

TBMB-PCB

4YA4042-1141G1)1/2

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (1/7) REV. 2
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|--|----------------|------|---------|
| 1 | D24 | RD39F-B Zener DI | 613A2232L0322 | 1 | |
| 2 | D206 | MA3047-M/RD4.7M-B2 Zener DI (CP) | 613A0103M0102B | 1 | |
| 3 | D201 | MA3100/RD10M-B Zener DI (CP) | 613A0103M0182 | 1 | |
| 4 | D211 | MA3120 Zener DI (CP) | 613A0291M0202 | 1 | |
| 5 | D202 | MA3300/RD30M-B Zener DI (CP) | 613A0103M0292 | 1 | |
| 6 | D10-19,203-205, 207,209,215,216, 226 | MA151WK/DAN202K Signal DI (CP) | 611A0003N0003 | 18 | |
| 7 | D3 | DFAlA1 Rectification DI | 610A0221L0021 | 1 | |
| 8 | D4-9,20-23,25 | EM12/SM-1A-02/DSA1A2 Rectification DI | 610A0003M0001 | 11 | |
| 9 | D26,28,29,210, 217-224 | MA152WA Signal DI (CP) | 611A0029M0002 | 12 | |
| 10 | DA1,4,6,8,10,11 | D1CA20 Diode array | 761A2232M0401 | 6 | |
| 11 | DA2,3,5,7,9,13 | D1CA20R Rectification diode | 610A3027M0001 | 6 | |
| 12 | R227,228 | RM73B2B510J RN resistance (CP) | 323A5015J0510 | 2 | |
| 13 | R323 | RM73B2B221J RN resistance (CP) | 323A5015J0221 | 1 | |
| 14 | R231,232 | RM73B2B154J RN resistance (CP) | 323A5015J0154 | 2 | |
| 15 | R317,324 | RM73B2B431J RN resistance (CP) | 323A5015J0431 | 2 | |
| 16 | R18,212,218,258 | RM73B2B511J RN resistance (CP) | 323A5015J0511 | 4 | |
| 17 | R211,217 | RM73B2B392J RN resistance (CP) | 323A5015J0392 | 2 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (2/7) REV. 2
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|-----------------------------------|---------------|------|---------|
| 18 | R51, 52, 62-78, 89, 113, 203, 210, 215, 216, 221, 222, 236-240, 280-287, 304-307, 311-316, 319, 320, 340, 341, 343, 347, 348 | RM73B2B102J resistance (CP) | 323A5015J0102 | 57 | |
| 19 | R107, 213, 219 | RM73B2B122J RN resistance (CP) | 323A5015J0122 | 3 | |
| 20 | R19 | RM73B2B202J RN resistance (CP) | 323A5015J0202 | 1 | |
| 21 | R95, 204, 327-330 | RM73B2B222J RN resistance (CP) | 323A5015J0222 | 6 | |
| 22 | R205, 254 | RM73B2B332J RN resistance (CP) | 323A5015J0332 | 2 | |
| 23 | R214, 220 | RM73B2B472J RN resistance (CP) | 323A5015J0472 | 2 | |
| 24 | R29-32, 88, 112, 234, 235, 260, 262, 264, 266, 296-303, 321, 322, 325, 326, 342, 346 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 26 | |
| 25 | R53-61, 206-209, 243, 256, 271-279, 310, 345 | RM73B2B562J RN resistance (CP) | 323A5015J0562 | 26 | |
| 26 | R224 | RM73B2B561J RN resistance (CP) | 323A5015J0561 | 1 | |
| 27 | R85-87, 90-94, 97, 295, 308, 309 | RM73B2B103J RN resistance (CP) | 323A5015J0103 | 12 | |
| 28 | R241 | RM73B2B393J RN resistance (CP) | 323A5015J0393 | 1 | |
| 29 | R229, 230 | RM73B2B203J RN resistance (CP) | 323A5015J0203 | 2 | |
| 30 | R202, 233, 242 | RM73B2B223J RN resistance (CP) | 323A5015J0223 | 3 | |
| 31 | R318 | RM73B2B333J RN resistance (CP) | 323A5015J0333 | 1 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (3/7) REV. 2
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------------------------|---|---------------|------|---------|
| 32 | R226,331-339 | RM73B2B124J RN resistance (CP) | 323A5015J0124 | 10 | |
| 33 | R201 | RM73B2B224J RN resistance (CP) | 323A5015J0224 | 1 | |
| 34 | R267-270 | RM73B2B511F RN resistance (CP) | 323A5015F0511 | 4 | |
| 35 | R259,265 | RM73B2B302F RN resistance (CP) | 323A5015F0302 | 2 | |
| 36 | R4,5,20,257 | RM73B2B242J RN resistance (CP) | 323A5015J0242 | 4 | |
| 37 | R261,263 | RM73B2B272F RN resistance (CP) | 323A5015F0272 | 2 | |
| 38 | R21,27,81,82,291, 294 | RM73B2B332F RN resistance (CP) | 323A5015F0332 | 6 | |
| 39 | R24,26 | RM73B2B392F RN resistance (CP) | 323A5015F0392 | 2 | |
| 40 | R80,83,289,293 | RM73B2B472F RN resistance (CP) | 323A5015F0472 | 4 | |
| 41 | R79,84,290,292 | RM73B2B123F RN resistance (CP) | 323A5015F0123 | 4 | |
| 42 | R244,247 | RM73B2B163F RN resistance (CP) | 323A5015F0163 | 2 | |
| 43 | R245,246,248-251 | RM73B2B363F RN resistance (CP) | 323A5015F0363 | 6 | |
| 44 | R22,28 | RM73B2B423F RN resistance (CP) | 323A5015F0433 | 2 | |
| 45 | R23,25 | RM73B2B223F RN resistance (CP) | 323A5015F0223 | 2 | |
| 46 | R7,8 | RSS1-68 Ω J RS resistance | 324A1012J0680 | 2 | |
| 47 | R110 | RD1/2Y2. 2K Ω J RD resistance | 321A1431J0222 | 1 | |
| 48 | R11,13,14,16,17 | RD1/2Y3. 9K Ω J RD resistance | 321A1431J0392 | 5 | |
| 49 | R98-106 | RD1/4Y5. 1K Ω J RD resistance | 321A1421J0512 | 9 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (4/7) REV. 2
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------------------------------------|--|----------------|------|---------|
| 50 | R33-50 | RD1/4Y7. 5K Ω J RD resistance | 321A1421J0752 | 18 | |
| 51 | R6,12,15 | RNS1-0. 51 Ω J RS resistance | 324A1012J0518 | 3 | |
| 52 | R223 | RM73B2B274J RN resistance (CP) | 323A5015J0274 | 1 | |
| 53 | C33,34 | TCC45SL1H220JYA 50V CC capacitor 22P | 302A1024K0220 | 2 | |
| 54 | C7,201,202 | CK3216B1H102K CK capacitor (CP) | 303A6009K3102 | 3 | |
| 55 | C203,205,207 | CK3216B1H103K CK capacitor (CP) | 303A6009K3103 | 3 | |
| 56 | C6,12-14,18,19, 24-32,209-224,226 | CK3216F1H104Z CK capacitor (CP) | 303A6009Z3104 | 32 | |
| 57 | C1 | CEUSM1J330 63V CE capacitor 33 μ | 304A1041J1330 | 1 | |
| 58 | C3,16,17 | CEUSM1H4R7 50V CE capacitor 4.7 μ | 304A1041H1479 | 3 | |
| 59 | C5 | CEUSM1H100 50V CE capacitor 10 μ | 304A1041H1100 | 1 | |
| 60 | C204 | CC3216SL1H220J CC capacitor (CP) | 303A3008K0220 | 1 | |
| 61 | C11,15 | CEUSM1H102 50V CE capacitor 1000 μ | 304A1041H1102 | 2 | |
| 62 | C20-23 | CQM92PP1H103F 50V CQ capacitor 0.01 μ | 306A4100F1103 | 4 | |
| 63 | Q13 | P8032AH MOS-CPU | 851A2152M0011 | 1 | |
| 64 | Q15 | MSM61048GS-VK MOS digital IC (FP) | 702A4924F0020 | 1 | |
| 65 | Q14 | MSM60769GS-VK MOS digital IC (FP) | 702A4924F7069V | 1 | |
| 66 | Q1 | HA13412 BIP linear system IC | 720A4021E0004 | 1 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (5/7) REV. 2
PCB version 6

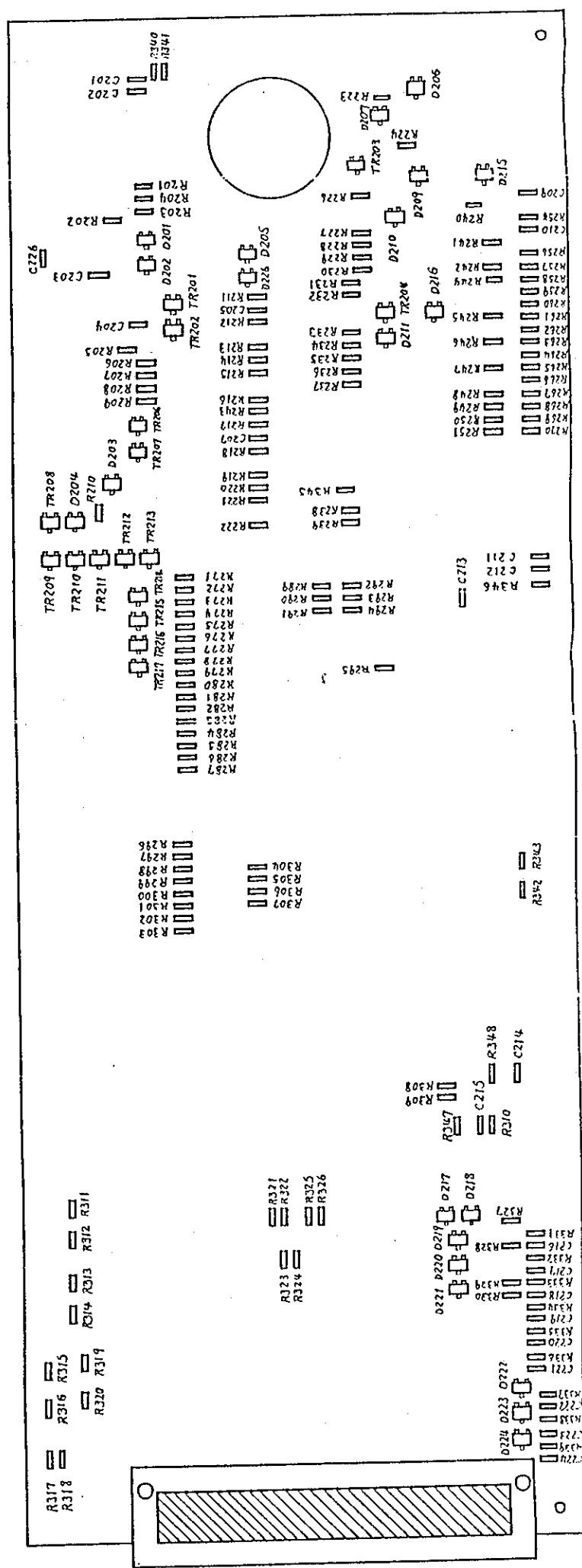
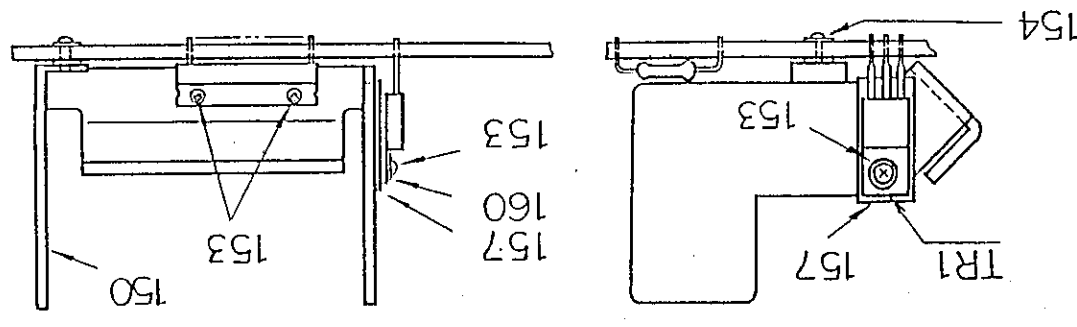
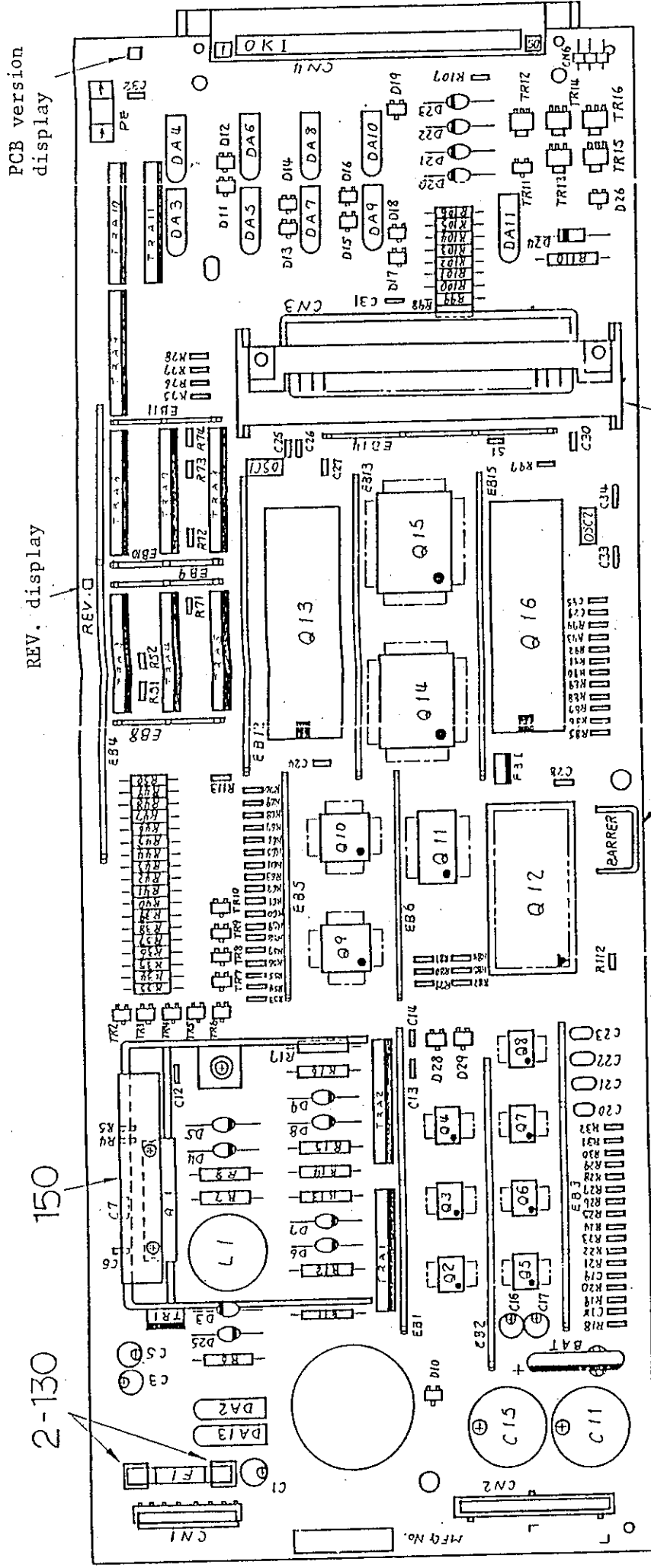
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|------------------------------|--|----------------|------|---------|
| 67 | Q11 | MSM5128-20GS-VK (Special) MOS-S-RAM (SO) | 804A0024N4302Y | 1 | |
| 68 | Q2,8 | SN74LS05NS BIP digital IC (SO) | 700A0550N0005 | 2 | |
| 69 | Q5-7 | NJM2901M BIP linear system IC (SO) | 720A0528N0002 | 3 | |
| 70 | Q4 | SN74LS07NS BIP digital IC (SO) | 700A0550N0007 | 1 | |
| 71 | Q3 | SN74LS09NS BIP digital IC (SO) | 700A0550N0009 | 1 | |
| 72 | Q16 | P80C31BH-1 MOS-CPU | 851A0152M0002 | 1 | |
| 73 | Q9,10 | MSM60366GS-VK MOS digital IC (FP) | 702A4924F3066V | 2 | |
| 74 | TR204 | 2SC3361/2SC2412K NPN-HF-TR (CP) | 602A1003N0002 | 1 | |
| 75 | TR2-11, 201, 202, 206-217 | 2SC3361 NPN-HF-TR (CP) | 602A1032N0002 | 24 | |
| 76 | TR12 | 2SB766A-Q/R PNP-LF-TR (CP) | 601A1130M0001 | 1 | |
| 77 | TR13-16 | 2SD1511 NPN-LF-TR (CP) | 603A1130N0003 | 4 | |
| 78 | TR203 | A1344/UN2111/DTA114K PNP-HF-TR (CP) | 600A1003N0003 | 1 | |
| 79 | TR1 | 2SA1010 PNP-HF-TR | 600A1223M0001 | 1 | |
| 80 | TRA1-11 | STA434A Transistor array | 760A4726M0001 | 11 | |
| 81 | Q12 | DL2-28A-05 IC socket | 245A1155P0280 | 1 | |
| 82 | Q12 | ROM | 4YR4064-1217G1 | 1 | |
| 83 | S1 | MCR18-JPW Chip jumper (CP) | 323A5011P0001 | 1 | |
| 84 | CN4 | PD50A2X0 PC connector | 224A1160P0500 | 1 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (6/7) REV. 2
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------|--------------------------------------|----------------------|------|---------|
| 85 | CN1 | ZC-014 PC connector | 224A3590P0140 | 1 | |
| 86 | CN2 | 1-172681-2 PC connector | 224A3462P0120 | 1 | |
| 87 | CN3 | 00-8272-244959762-06 PC connector | 224A3607P0440 | 1 | |
| 88 | CN6 | FFC-2TLAW1B FC connector | 225A3119P0020 | 1 | |
| 89 | L1 | OL1614-102KR70(D) H coil | 353A3002K0102 | 1 | |
| 90 | OSC1 | FAR-C4SB11059000-M02 Vibrator | 4LP-12186-1 | 1 | |
| 91 | OSC2 | CSA16.000MX2 Ceramic oscillator | 381A1101B2005 | 1 | |
| 92 | PE | EE-SJ5-B Photocoupler | 652A0127M0009 | 1 | |
| 93 | BAT | CR2430 Battery | 4LP-45478 | 1 | |
| 94 | | FP-213 Fuse holder | 4LP-7142 | 2 | |
| 95 | F1 | GG52-1/2 Fuse | 540A2036M1252 | 1 | |
| 96 | | Connector support bracket | 4PP4043- 1996P001 | 1 | |
| 97 | | P3055B Push rivet | 136A1180P0001 | 2 | |
| 98 | FB1 | DST306-55PZ103Z EMI filter | 342A1004P2103 | 1 | |
| 99 | EB8,9-11 | Power bar | 4PP4044- 1632P001 | 4 | |
| 100 | EB3 | Power bar L=60. 96 P=15. 24 N=5 | 3LH-31313-4 | 1 | |
| 101 | EB14 | Power bar L=45. 72 P=15. 24 N=4 | 3LH-31313-5 | 1 | |
| 102 | EB5,6 | Power bar L=45. 72 P=45. 72 N=2 | 3LH-31313-85 | 2 | |

TBMB-Printed Circuit Board (4YA4042-1141G1) 2/2 (7/7) REV. 2
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------|------------------------------------|------------------------|------|---------|
| 103 | EB1,2,12,13,15 | Power bar L=60. 96 P=30. 48 N=3 | 3LH-31313-96 | 5 | |
| 104 | EB4 | Power bar L=91. 44 P=30. 48 N=4 | 3LH-31313-86 | 1 | |
| 105 | | Barrier | 4PP4044- 1698P001 | 1 | |
| 106 | | Heat sink | 4PP4044- 1695P001 | 1 | |
| 107 | | Screw (pan-head SW with 2W) | +P(SW+2W)2. 5-6-HHC | 3 | |
| 108 | | Screw (pan-head SW with W) | +P(SW+W)3-6- HHC | 1 | |
| 109 | | Thermal capacitor 30B-6001 | 4LP-44106-3 | 1 | |
| 110 | | Insulation bush | 4LP-4967-8 | 1 | |



| | |
|-------------|--------------|
| Rev. No. | 3 |
| PCB version | 7 (0) |
| Remarks | ECO ML200-40 |

TBMB-Printed Circuit Board

(4YA4042-1141G1) 1/2

TBMB-Printed Circuit Board (4YA4021-1141G1) 2/2 (1/7) REV. 3
PCB version 7 (0)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|--|----------------|------|---------|
| 1 | D24 | RD39F-B Zener DI | 613A2232L0322 | 1 | |
| 2 | D206 | MA3047-M/RD4.7M-B2 Zener DI (CP) | 613A0103M0102B | 1 | |
| 3 | D201 | MA3100/RD10M-B Zener DI (CP) | 613A0103M0182 | 1 | |
| 4 | D211 | MA3120 Zener DI (CP) | 613A0291M0202 | 1 | |
| 5 | D202 | MA3300/RD30M-B Zener DI (CP) | 613A0103M0292 | 1 | |
| 6 | D10-19,203-205, 207,209,215,216, 226 | MA151WK/DAN202K Signal DI (CP) | 611A0003N0003 | 18 | |
| 7 | D3 | DFAlA1 Rectification DI | 610A0221L0021 | 1 | |
| 8 | D4-9,20-23,25 | EM1Z/SM-1A-02/DSA1A2 Rectification DI | 610A0003M0001 | 11 | |
| 9 | D26,28,29,210 217-224 | MA152WA Signal DI (CP) | 611A0029M0002 | 12 | |
| 10 | DA1,4,6,8,10,11 | D1CA20 Diode array | 761A2232M0401 | 6 | |
| 11 | DA2,3,5,7,9,13 | D1CA20R Rectification diode | 610A3027M0001 | 6 | |
| 12 | R227,228 | RM73B2B510J RN resistance (CP) | 323A5015J0510 | 2 | |
| 13 | R323 | RM73B2B221J RN resistance (CP) | 323A5015J0221 | 1 | |
| 14 | R231,232 | RM73B2B154J RN resistance (CP) | 323A5015J0154 | 2 | |
| 15 | R317,324 | RM73B2B431J RN resistance (CP) | 323A5015J0431 | 2 | |
| 16 | R18,212,218,258 | RM73B2B511J RN resistance (CP) | 323A5015J0511 | 4 | |
| 17 | R211,217 | RM73B2B392J RN resistance (CP) | 323A5015J0392 | 2 | |

TBMB-Printed Circuit Board (4YA4021-1141G1) 2/2 (2/7) REV. 3
PCB version 7 (0)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|---|-----------------------------------|---------------|------|---------|
| 18 | R51,52,62-78,89, 113,203,210,215, 216,221,222, 236-240,280-287, 304-307,311-316, 319,320,340,341, 343,347,348 | RM73B2B102J RN resistance (CP) | 323A5015J0102 | 57 | |
| 19 | R107,213,219 | RM73B2B122J RN resistance (CP) | 323A5015J0122 | 3 | |
| 20 | R19 | RM73B2B202J RN resistance (CP) | 323A5015J0202 | 1 | |
| 21 | R95,204,327-330 | RM73B2B222J RN resistance (CP) | 323A5015J0222 | 6 | |
| 22 | R205,254 | RM73B2B332J RN resistance (CP) | 323A5015J0332 | 2 | |
| 23 | R214,220 | RM73B2B472J RN resistance (CP) | 323A5015J0472 | 2 | |
| 24 | R29-32,88,112, 234,235,260,262, 264,266,296-303, 321,322,325,326, 342,346 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 26 | |
| 25 | R53-61,206-209, 243,256,271-279, 310,345 | RM73B2B562J RN resistance (CP) | 323A5015J0562 | 26 | |
| 26 | R224 | RM73B2B561J RN resistance (CP) | 323A5015J0561 | 1 | |
| 27 | R85-87,90-94,97, 295,308,309 | RM73B2B103J RN resistance (CP) | 323A5015J0103 | 12 | |
| 28 | R241 | RM73B2B393J RN resistance (CP) | 323A5015J0393 | 1 | |
| 29 | R229,230 | RM73B2B203J RN resistance (CP) | 323A5015J0203 | 2 | |
| 30 | R202,233,242 | RM73B2B223J RN resistance (CP) | 323A5015J0223 | 3 | |
| 31 | R318 | RM73B2B333J RN resistance (CP) | 323A5015J0333 | 1 | |

TBMB-Printed Circuit Board (4YA4021-1141G1) 2/2 (3/7) REV. 3
PCB version 7 (0)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------------------------|-----------------------------------|---------------|------|---------|
| 32 | R226,331-339 | RM73B2B124J RN resistance (CP) | 323A5015J0124 | 10 | |
| 33 | R201 | RM73B2B224J RN resistance (CP) | 323A5015J0224 | 1 | |
| 34 | R267-270 | RM73B2B511F RN resistance (CP) | 323A5015F0511 | 4 | |
| 35 | R259,265 | RM73B2B302F RN resistance (CP) | 323A5015F0302 | 2 | |
| 36 | R4,5,20,257 | RM73B2B242J RN resistance (CP) | 323A5015J0242 | 4 | |
| 37 | R261,263 | RM73B2B272F RN resistance (CP) | 323A5015F0272 | 2 | |
| 38 | R21,27,81,82, 291,294 | RM73B2B332F RN resistance (CP) | 323A5015F0332 | 6 | |
| 39 | R24,26 | RM73B2B392F RN resistance (CP) | 323A5015F0392 | 2 | |
| 40 | R80,83,289,293 | RM73B2B472F RN resistance (CP) | 323A5015F0472 | 4 | |
| 41 | R79,84,290,292 | RM73B2B123F RN resistance (CP) | 323A5015F0123 | 4 | |
| 42 | R244,247 | RM73B2B163F RN resistance (CP) | 323A5015F0163 | 2 | |
| 43 | R245,246,248-251 | RM73B2B363F RN resistance (CP) | 323A5015F0363 | 6 | |
| 44 | R22,28 | RM73B2B433F RN resistance (CP) | 323A5015F0433 | 2 | |
| 45 | R23,25 | RM73B2B223F RN resistance (CP) | 323A5015F0223 | 2 | |
| 46 | R7,8 | RSS1-68ΩJ RS resistance | 324A1012J0680 | 2 | |
| 47 | R110 | RD1/2Y2.2kΩJ RD resistance | 321A1431J0222 | 1 | |
| 48 | R11,13,14,16,17 | RD1/2Y3.9kΩJ RD resistance | 321A1431J0392 | 5 | |
| 49 | R98-106 | RD1/4Y5.1kΩJ RD resistance | 321A1421J0512 | 9 | |

TBMB-Printed Circuit Board (4YA4021-1141G1) 2/2 (4/7) REV. 3
PCB version 7 (0)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|---|----------------|------|---------|
| 50 | R33-50 | RD1/4Y7.5kΩJ RD resistance | 321A1421J0752 | 18 | |
| 51 | R6,12,15 | RNS1-0.51ΩJ RS resistance | 324A1012J0518 | 3 | |
| 52 | R223 | RM73B2B274J RN resistance (CP) | 323A5015J0274 | 1 | |
| 53 | C33,34 | TCC45SL1H220JYA 50V CC capacitor 22P | 302A1024K0220 | 2 | |
| 54 | C7,201,202 | CK3216B1H102K CK capacitor (CP) | 303A6009K3102 | 3 | |
| 55 | C203,205,207 | CK3216B1H103K CK capacitor (CP) | 303A6009K3103 | 3 | |
| 56 | C6,12-14,18,19, 24-32,209-224, 226 | CK3216F1H104Z CK capacitor (CP) | 303A6009Z3104 | 32 | |
| 57 | C1 | CEUSM1J330 63V CE capacitor 33μ | 304A1041J1330 | 1 | |
| 58 | C3,16,17 | CEUSM1H4R7 50V CE capacitor 4.7μ | 304A1041H1479 | 3 | |
| 59 | C5 | CEUSM1H100 50V CE capacitor 10μ | 304A1041H1100 | 1 | |
| 60 | C204 | CC3216SL1H220J CC capacitor (CP) | 303A3008K0220 | 1 | |
| 61 | C11,15 | CEUSM1H102 50V CE capacitor 1000μ | 304A1041H1102 | 2 | |
| 62 | C20-23 | CQM92PP1H103F 50V CQ capacitor 0.01μ | 306A4100F1103 | 4 | |
| 63 | Q13 | P8032AH MOS-CPU | 851A2152M0011 | 1 | |
| 64 | Q15 | MSM61048GS-VK MOS digital IC (FP) | 702A4924F0020 | 1 | |
| 65 | Q14 | MSM60769GS-VK MOS digital IC (FP) | 702A4924F7069V | 1 | |
| 66 | Q1 | HA13412 BIP linear system IC | 720A4021E0004 | 1 | |

TBMB-Printed Circuit Board (4YA4021-1141G1) 2/2 (5/7) REV. 3
PCB version 7 (0)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------------------|--|----------------|------|---------|
| 67 | Q11 | MSM5128-20GS-VK (Special) MOS-S-RAM (SO) | 804A0024N4302Y | 1 | |
| 68 | Q2,8 | SN74LS05NS BIP digital IC (SO) | 700A0550N0005 | 2 | |
| 69 | Q5-7 | NJM2901M BIP linear system IC (SO) | 720A0528N0002 | 3 | |
| 70 | Q4 | SN74LS07NS BIP digital IC (SO) | 700A0550N0007 | 1 | |
| 71 | Q3 | SN74LS09NS BIP digital IC (SO) | 700A0550N0009 | 1 | |
| 72 | Q16 | P80C31BH-1 MOS-CPU | 851A0152M0002 | 1 | |
| 73 | Q9,10 | MSM60366GS-VK MOS digital IC (FP) | 702A4924F3066V | 2 | |
| 74 | TR204 | 2SC3361/2SC2412K NPN-HF-TR (CP) | 602A1003N0002 | 1 | |
| 75 | TR2-11,201,202, 206-217 | 2SC3361 NPN-HF-TR (CP) | 602A1032N0002 | 24 | |
| 76 | TR12 | 2SB766A-Q/R PNP-LF-TR (CP) | 601A1130M0001 | 1 | |
| 77 | TR13-16 | 2SD1511 NPN-LF-TR (CP) | 603A1130N0003 | 4 | |
| 78 | TR203 | A1344/UN2111/DTA114K PNP-HF-TR (CP) | 600A1003N0002 | 1 | |
| 79 | TR1 | 2SA1069A PNP-HF-TR | 600A1223M0001 | 1 | |
| 80 | TR1-11 | STA434A Transistor array | 760A4726M0001 | 11 | |
| 81 | Q12 | DL2-28A-05 IC socket | 245A1155P0280 | 1 | |
| 82 | Q12 | ROM | 4YR4064-1217G1 | 1 | |
| 83 | S1 | MCR-18-JPW Chip jumper (CP) | 323A5011P0001 | 1 | |
| 84 | CN4 | PD50A2X0 PC connector | 224A1160P0500 | 1 | |

TBMB-Printed Circuit Board (4YA4021-1141G1) 2/2 (6/7) REV. 3
PCB version 7 (0)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------|--------------------------------------|----------------------|------|---------|
| 85 | CN1 | ZC-014 PC connector | 224A3590P0140 | 1 | |
| 86 | CN2 | 1-172681-2 PC connector | 224A3462P0120 | 1 | |
| 87 | CN3 | 00-8272-244959762-06 PC connector | 224A3607P0440 | 1 | |
| 88 | CN6 | FFC-3TLAW1B FC connector | 225A3119P0030 | 1 | |
| 89 | L1 | OL1614-102KR70(D) H coil | 353A3002K0102 | 1 | |
| 90 | OSC1 | FAR-C4SB11059000-M02 Vibrator | 4LP-12186-1 | 1 | |
| 91 | OSC2 | CSA16.000MX2 Ceramic oscillator | 381A1101B2005 | 1 | |
| 92 | PE | EE-SJ5-B Photocoupler | 652A0127M0009 | 1 | |
| 93 | BAT | CR2430 Battery | 4LP-45478 | 1 | |
| 94 | | FP-213 Fuse holder | 4LP-7142 | 2 | |
| 95 | F1 | GG52-1/2 Fuse | 540A2036M1252 | 1 | |
| 96 | | Connector support bracket | 4PP4043- 1996P001 | 1 | |
| 97 | | P3055B Push rivet | 136A1180P0001 | 2 | |
| 98 | FB1 | DST306-55F103Z EMI filter | 342A1004P2103 | 1 | |
| 99 | EB8,9-11 | Power bar | 4PP4044- 1632P001 | 4 | |
| 100 | EB3 | Power bar L=60.96 P=15.24 N=5 | 3LH-31313-4 | 1 | |
| 101 | EB14 | Power bar L=45.72 P=15.24 N=4 | 3LH-31313-5 | 1 | |
| 102 | EB5,6 | Power bar L=45.72 P=45.72 N=2 | 3LH-31313-85 | 2 | |

TBMB-Printed Circuit Board (4YA4021-1141G1) 2/2 (7/7) REV. 3
PCB version 7 (0)

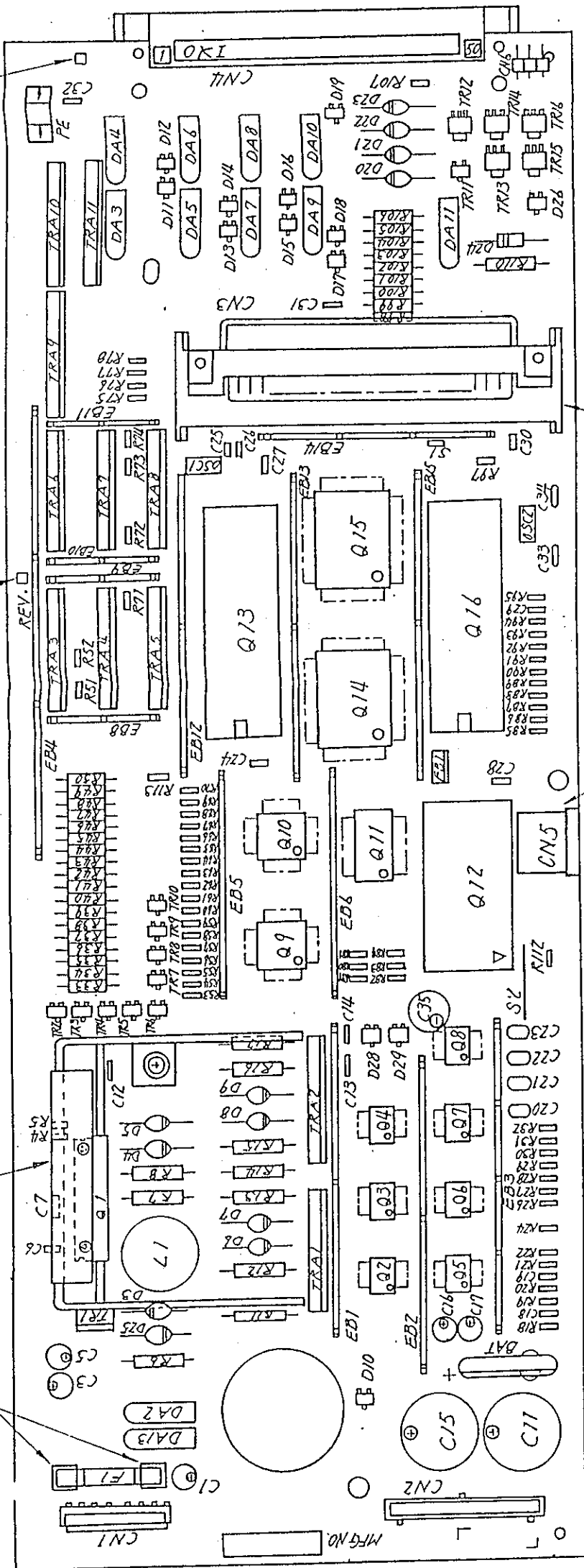
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------|----------------------------------|------------------------|------|---------|
| 103 | EB1,2,12,13,15 | Power bar L=60.96 P=30.48 N=3 | 3LH-31313-96 | 5 | |
| 104 | EB4 | Power bar L=91.44 P=30.48 N=4 | 3LH-31313-86 | 1 | |
| 105 | | Barrier | 4PP4044- 1698P001 | 1 | |
| 106 | | Heat sink | 4PP4044- 1695P001 | 1 | |
| 107 | | Screw (pan-head SW with 2W) | +P(SW+2W) 2.5-6-HHC | 3 | |
| 108 | | Screw (pan-head SW with W) | +P(SW+W) 3-6-HH0 | 1 | |
| 109 | | Thermal capacitor 30B-6001 | 4LP-44106-3 | 1 | |
| 110 | | Insulation bush | 4LP-4967-8 | 1 | |

PCB version display

REV. display

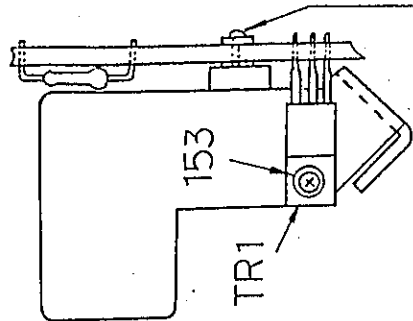
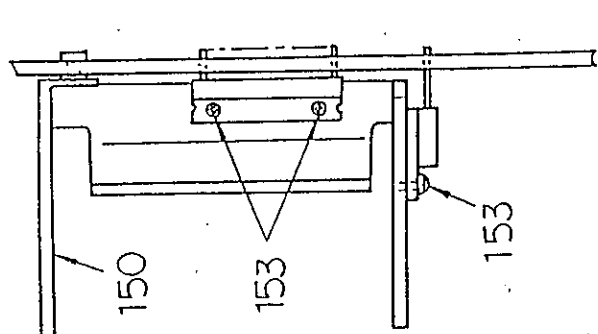
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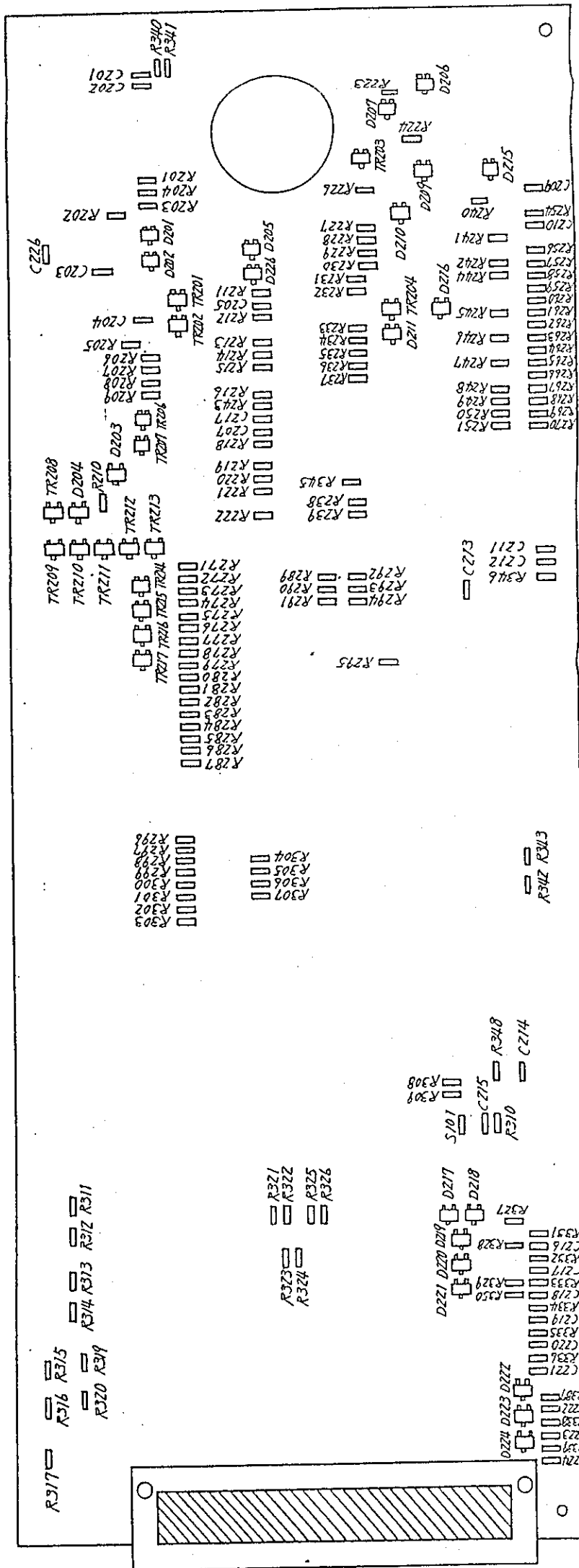


134, 2-135

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| | |
|-------------|--|
| Rev. No. | 3 |
| PCB version | 7 (1) |
| Remarks | ECO ML200-047, 065, 067, 071, 076, 097 |

TBMB-2 Printed Circuit Board

(4YA4042-1141G22) 1/2

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (1/9) REV. 3
PCB version 7 (1)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|--|----------------|------|---------|
| 1 | | TBMB-Printed circuit board (2 layer) | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | D24 | RD39F-B Zener DI | 613A2232L0322 | 1 | |
| 5 | D206 | MA3047-M/RD4.7M-B2 Zener DI (CP) | 613A0103M0102B | 1 | |
| 6 | D201 | MA3100/RD10M-B Zener DI (CP) | 613A0103M0182 | 1 | |
| 7 | D211 | MA3120 Zener DI (CP) | 613A0291M0202 | 1 | |
| 8 | D202 | MA3300/RD30M-B Zener DI (CP) | 613A0103M0292 | 1 | |
| 9 | D10-19,203-205, 207,209,215,216, 226 | MA151WK/DAN202K Signal DI (CP) | 611A0003N0003 | 18 | |
| 10 | | | | | |
| 11 | D3 | DFA1A1 Rectification DI | 610A0221L0021 | 1 | |
| 12 | D4-9,20-23,25 | EM1Z/SM-1A-02/DSA1A2 Rectification DI | 610A0003M0001 | 11 | |
| 13 | D26,28,29,210, 217-224 | MA152WA Signal DI (CP) | 611A0029M0002 | 12 | |
| 14 | DA4,6,8,10,11 | D1CA20 Diode array | 761A2232M0401 | 5 | |
| 15 | DA2,3,5,7,9,13 | D1CA20R Rectification diode | 610A3027M0001 | 6 | |
| 16 | | | | | |
| 17 | R317 | RM73B2B201J RN resistance (CP) | 323A5015J0201 | 1 | |
| 18 | R227,228 | RM73B2B510J RN resistance (CP) | 323A5015J0510 | 2 | |
| 19 | R323 | RM73B2B221J RN resistance (CP) | 323A5015J0221 | 1 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (2/9) REV. 3
PCB version 7 (1)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|---|-----------------------------------|---------------|------|---------|
| 20 | R231,232 | RM73B2B154J RN resistance (CP) | 323A5015J0154 | 2 | |
| 21 | R324 | RM73B2B431J RN resistance (CP) | 323A5015J0431 | 1 | |
| 22 | R18,212,218,258 | RM73B2B511J RN resistance (CP) | 323A5015J0511 | 4 | |
| 23 | R211,217 | RM73B2B392J RN resistance (CP) | 323A5015J0392 | 2 | |
| 24 | R51,52,62-78,89, 113,203,210,215, 216,221,222, 236-240,280-287, 304-307,311-316, 319,320,340,341, 343,348 | RM73B2B102J RN resistance (CP) | 323A5015J0102 | 56 | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | R107,213,219 | RM73B2B122J RN resistance (CP) | 323A5015J0122 | 3 | |
| 30 | R19 | RM73B2B202J RN resistance (CP) | 323A5015J0202 | 1 | |
| 31 | R95,204,327-330 | RM73B2B222J RN resistance (CP) | 323A5015J0222 | 6 | |
| 32 | R205,254 | RM73B2B332J RN resistance (CP) | 323A5015J0332 | 2 | |
| 33 | R214,220 | RM73B2B472J RN resistance (CP) | 323A5015J0472 | 2 | |
| 34 | R29-32,88,112, 234,235,260,262, 264,266,296-303, 321,322,325,326, 342,346 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 26 | |
| 35 | | | | | |
| 36 | | | | | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (3/9) REV. 3
PCB version 7 (1)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|-----------------------------------|---------------|------|---------|
| 37 | R53-61, 206-209, 243, 256, 271-279, 310, 345 | RM73B2B562J RN resistance (CP) | 323A5015J0562 | 26 | |
| 38 | | | | | |
| 39 | R224 | RM73B2B561J RN resistance (CP) | 323A5015J0561 | 1 | |
| 40 | R85-87, 90-94, 97, 295, 308, 309 | RM73B2B103J RN resistance (CP) | 323A5015J0103 | 12 | |
| 41 | | | | | |
| 42 | R241 | RM73B2B393J RN resistance (CP) | 323A5015J0393 | 1 | |
| 43 | R229, 230 | RM73B2B203J RN resistance (CP) | 323A5015J0203 | 2 | |
| 44 | R202, 233, 242 | RM73B2B223J RN resistance (CP) | 323A5015J0223 | 3 | |
| 45 | | | | | |
| 46 | R226, 331-339 | RM73B2B124J RN resistance (CP) | 323A5015J0124 | 10 | |
| 47 | R201 | RM73B2B224J RN resistance (CP) | 323A5015J0224 | 1 | |
| 48 | R267-270 | RM73B2B511F RN resistance (CP) | 323A5015F0511 | 4 | |
| 49 | R259, 265 | RM73B2B302F RN resistance (CP) | 323A5015F0302 | 2 | |
| 50 | R4, 5, 20, 257 | RM73B2B242J RN resistance (CP) | 323A5015J0242 | 4 | |
| 51 | R261, 263 | RM73B2B272F RN resistance (CP) | 323A5015F0272 | 2 | |
| 52 | R21, 24, 26, 27, 81, 82, 291, 294 | RM73B2B332F RN resistance (CP) | 323A5015F0332 | 8 | |
| 53 | | | | | |
| 54 | R80, 83, 289, 293 | RM73B2B472F RN resistance (CP) | 323A5015F0472 | 4 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (4/9) REV. 3
PCB version 7 (1)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|--|---------------|------|---------|
| 55 | R79,84,290,292 | RM73B2B123F RN resistance (CP) | 323A5015F0123 | 4 | |
| 56 | R244,247 | RM73B2B163F RN resistance (CP) | 323A5015F0163 | 2 | |
| 57 | R245,246,248-251 | RM73B2B363F RN resistance (CP) | 323A5015F0363 | 6 | |
| 58 | R22,28 | RM73B2B433F RN resistance (CP) | 323A5015F0433 | 2 | |
| 59 | | | | | |
| 60 | R7,8 | RSS1-68 Ω J RS resistance | 324A1012J0680 | 2 | |
| 61 | R110 | RD1/2Y2.2k Ω J RD resistance | 321A1431J0222 | 1 | |
| 62 | R11,13,14,16,17 | RD1/2Y3.9k Ω J RD resistance | 321A1431J0392 | 5 | |
| 63 | R98-106 | RD1/4Y5.1k Ω J RD resistance | 321A1421J0512 | 9 | |
| 64 | R33-50 | RD1/4Y3.6k Ω J RD resistance | 321A1421J0362 | 18 | |
| 65 | R6,12,15 | RNS1-0.51 Ω J RS resistance | 324A1012J0518 | 3 | |
| 66 | R223 | RM73B2B274J RN resistance (CP) | 323A5015J0274 | 1 | |
| 67 | | | | | |
| 68 | C33,34 | TCC45SL1H220JYA CC condenser | 302A1024K0220 | 2 | |
| 69 | C7,201,202 | CK3216B1H102K CK condenser (CP) | 303A6009K3102 | 3 | |
| 70 | C203,205,207 | CK3216B1H103K CK condenser (CP) | 303A6009K3103 | 3 | |
| 71 | C6,12-14,18,19, 24-32,209-224, 226 | CK3216F1H104Z CK condenser (CP) | 303A6009Z3104 | 32 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (5/9) REV. 3
PCB version 7 (1)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------|--|----------------|------|---------|
| 72 | | | | | |
| 73 | C1 | CEUSM1J330 CE condenser | 304A1041J1330 | 1 | |
| 74 | C3,16,17 | CEUSM1H4R7 CE condenser | 304A1041H1479 | 3 | |
| 75 | C5 | CEUSM1H100 CE condenser | 304A1041H1100 | 1 | |
| 76 | C204 | CC3216SL1H220J CE condenser (CP) | 303A3008K0220 | 1 | |
| 77 | | | | | |
| 78 | C11,15 | CEUSM1H102 CE condenser | 304A1041H1102 | 2 | |
| 79 | C20-23 | CQMFS92PP2A103F CQ condenser | 306A4103F2103 | 4 | |
| 80 | C35 | CEUSM1A221 CE condenser | 304A1041A1221 | 1 | |
| 81 | | | | | |
| 82 | Q13 | P8032AH MOS-CPU | 851A2152M0011 | 1 | |
| 83 | Q15 | MSM61048GS-VK MOS digital IC (FP) | 702A4924F0020 | 1 | |
| 84 | Q14 | MSM60769GS-VK MOS digital IC (FP) | 702A4924F7069V | 1 | |
| 85 | Q1 | HA13412 BIP linear system | 720A4021E0004 | 1 | |
| 86 | Q11 | MSM5128-20GS-VK (Special) MOS-S-RAM (SO) | 804A0024N4302Y | 1 | |
| 87 | Q2,8 | SN74LS05NS BIP digital IC (SO) | 700A0550N0005 | 2 | |
| 88 | Q5-7 | NJM2901M BIP linear system IC (SO) | 720A0528N0002 | 3 | |
| 89 | Q4 | SN74LS07NS BIP digital IC (SO) | 700A0550N0007 | 1 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (6/9) REV. 3
PCB version 7 (1)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------------------|--|----------------|------|---------|
| 90 | Q3 | SN74LS09NS BIP digital IC (SO) | 700A0550N0009 | 1 | |
| 91 | Q16 | P80C31BH-1/80C51F-49 MOS-CPU | 851A0103M0001 | 1 | |
| 92 | Q9,10 | MSM60366GS-VK MOS digital IC (FP) | 702A4924F3066V | 2 | |
| 93 | | | | | |
| 94 | | | | | |
| 95 | TR204 | 2SC3361/2SC2412K NPN-HF-TR (CP) | 602A1003N0002 | 1 | |
| 96 | TR2-11,201,202, 206-217 | 2SC3361 NPN-HF-TR (CP) | 602A1032N0002 | 24 | |
| 97 | TR12 | 2SB766A-Q/R PNP-LF-TR (CP) | 601A1130M0001 | 1 | |
| 98 | TR13-16 | 2SD1511 NPN-LF-TR (CP) | 603A1130N0003 | 4 | |
| 99 | TR203 | A1344/UN2111/DTA114K PNP-HF-TR (CP) | 600A1003N0003 | 1 | |
| 100 | TR1 | 2SA1488/2SB1185 PNP-HF-TR | 600A1203M0001 | 1 | |
| 101 | TRA1-11 | STA434A Transistor array | 760A4726M0001 | 11 | |
| 102 | | | | | |
| 103 | | | | | |
| 104 | Q12 | DL2-28A-05 IC socket | 245A1155P0280 | 1 | |
| 105 | | | | | |
| 106 | | | | | |
| 107 | S1,101 | MCR18-JPW Chip jumper (CP) | 323A5011P0001 | 2 | |
| 108 | | | | | |
| 109 | S2 | U-type short wire | 5HK-31036-175 | 1 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (7/9) REV. 3
PCB version 7 (1)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|--|---------------|------|---------|
| 110 | CN4 | PD50A2X0 PC connector | 224A1160P0500 | 1 | |
| 111 | CN1 | ZC-014 PC connector | 224A3590P0140 | 1 | |
| 112 | CN2 | 1-172681-2 PC connector | 224A3462P0120 | 1 | |
| 113 | CN3 | 00-8272-244959762-06 PC connector | 224A3607P0440 | 1 | |
| 114 | CN6 | FFC-3TLAW1B FC connector | 225A3119P0030 | 1 | |
| 115 | CN5 | TCS7580-01-201 Round head connector | 221A1525P0081 | 1 | |
| 116 | | | | | |
| 117 | L1 | OL1614-102KR70(D) H coil | 353A3002K0102 | 1 | |
| 118 | | | | | |
| 119 | | | | | |
| 120 | OSC1 | FAR-C4SB11059000-M02 Vibrator | 4LP-12186-1 | 1 | |
| 121 | OSC2 | CSA16.000MX2 Ceramic oscillator | 381A1101B2005 | 1 | |
| 122 | | | | | |
| 123 | | | | | |
| 124 | PE | EE-SJ5-B Photocoupler | 652A0127M0009 | 1 | |
| 125 | | | | | |
| 126 | | | | | |
| 127 | BAT | CR2430 Battery | 4LP-45478 | 1 | |
| 128 | | | | | |
| 129 | | | | | |
| 130 | | FP-213 Fuse holder | 4LP-7142 | 2 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (8/9) REV. 3
PCB version 7 (1)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------|----------------------------------|----------------------|------|---------|
| 131 | F1 | GG52-1/2 Fuse | 540A2036M1252 | 1 | |
| 132 | | | | | |
| 133 | | | | | |
| 134 | | Connector support bracket | 4PP4043- 1996P001 | 1 | |
| 135 | | P3055B Push rivet | 136A1180P0001 | 2 | |
| 136 | | | | | |
| 137 | FB1 | DST306-55F103Z EMI filter | 342A1004P2103 | 1 | |
| 138 | | | | | |
| 139 | EB8,9-11 | Power bar | 4PP4044- 1632P001 | 4 | |
| 140 | EB3 | Power bar L=60.96 P=15.24 N=5 | 3LH-31313-4 | 1 | |
| 141 | EB14 | Power bar L=45.72 P=15.24 N=4 | 3LH-31313-5 | 1 | |
| 142 | EB5,6 | Power bar L=45.72 P=45.72 N=2 | 3LH-31313-85 | 2 | |
| 143 | EB1,2,12,13,15 | Power bar L=60.96 P=30.48 N=3 | 3LH-31313-96 | 5 | |
| 144 | EB4 | Power bar L=91.44 P=30.48 N=4 | 3LH-31313-86 | 1 | |
| 145 | | | | | |
| 146 | | | | | |
| 147 | | | | | |
| 148 | | | | | |
| 149 | | | | | |
| 150 | | Heat sink | 4PP4044- 1695P001 | 1 | |
| 151 | | | | | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (9/9) REV. 3
PCB version 7 (1)

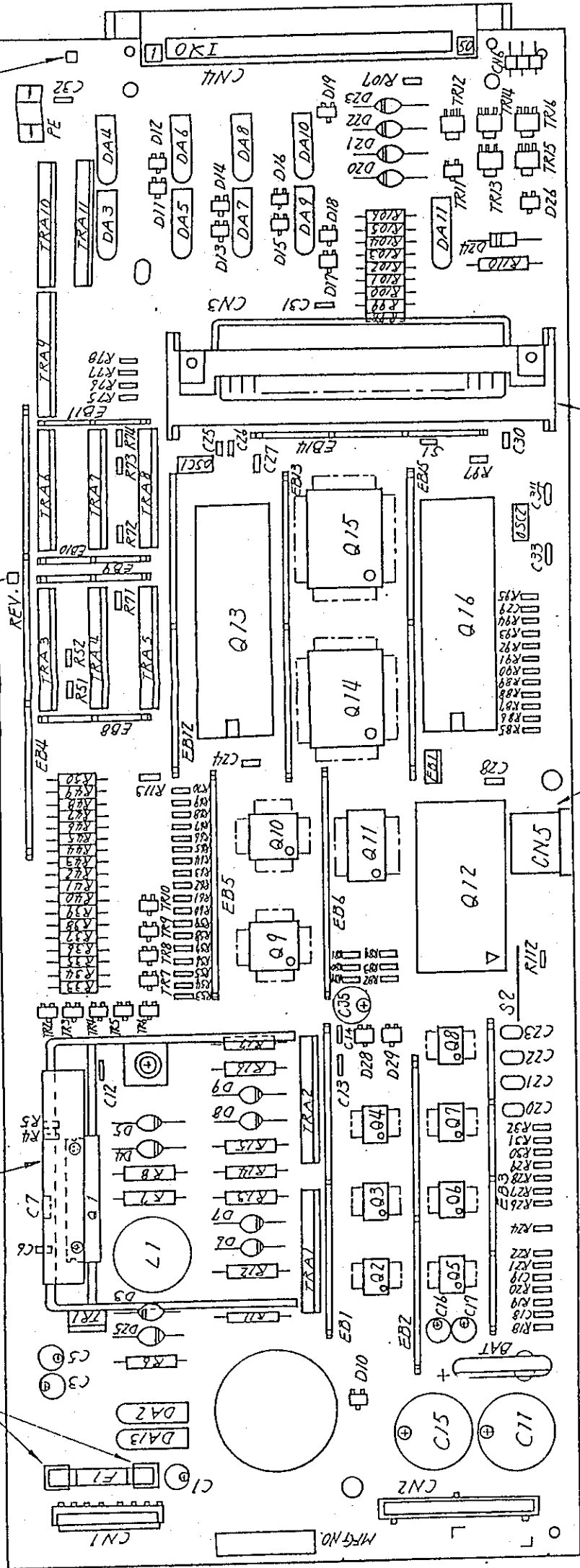
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|--------------------------------|------------------------|------|---------|
| 152 | | | | | |
| 153 | | Screw (pan-head SW with 2W) | +P(SW+2W) 2.5-6-HHC | 3 | |
| 154 | | Screw (pan-head SW with W) | +P(SW+W) 3-6-HHC | 1 | |
| 155 | | | | | |
| 156 | | | | | |
| 157 | | | | | |
| 158 | | | | | |
| 159 | | | | | |
| 160 | | | | | |
| 161 | | | | | |
| 162 | | | | | |
| 164 | | | | | |
| 165 | | | | | |
| 166 | | | | | |
| 167 | | | | | |
| 168 | | | | | |

PCB version display

REV. display

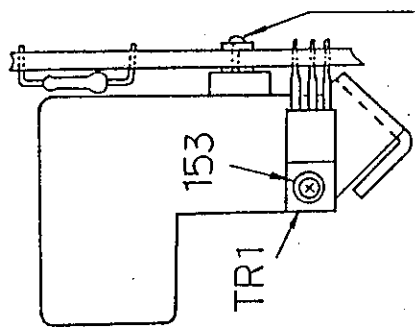
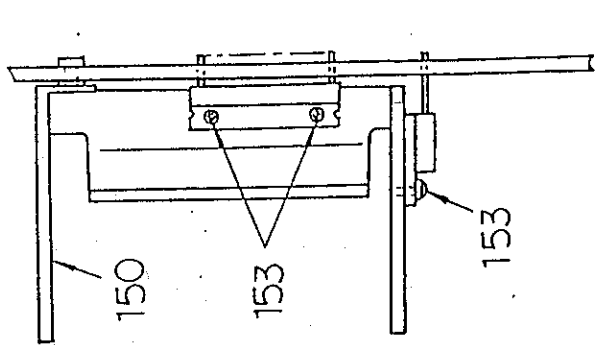
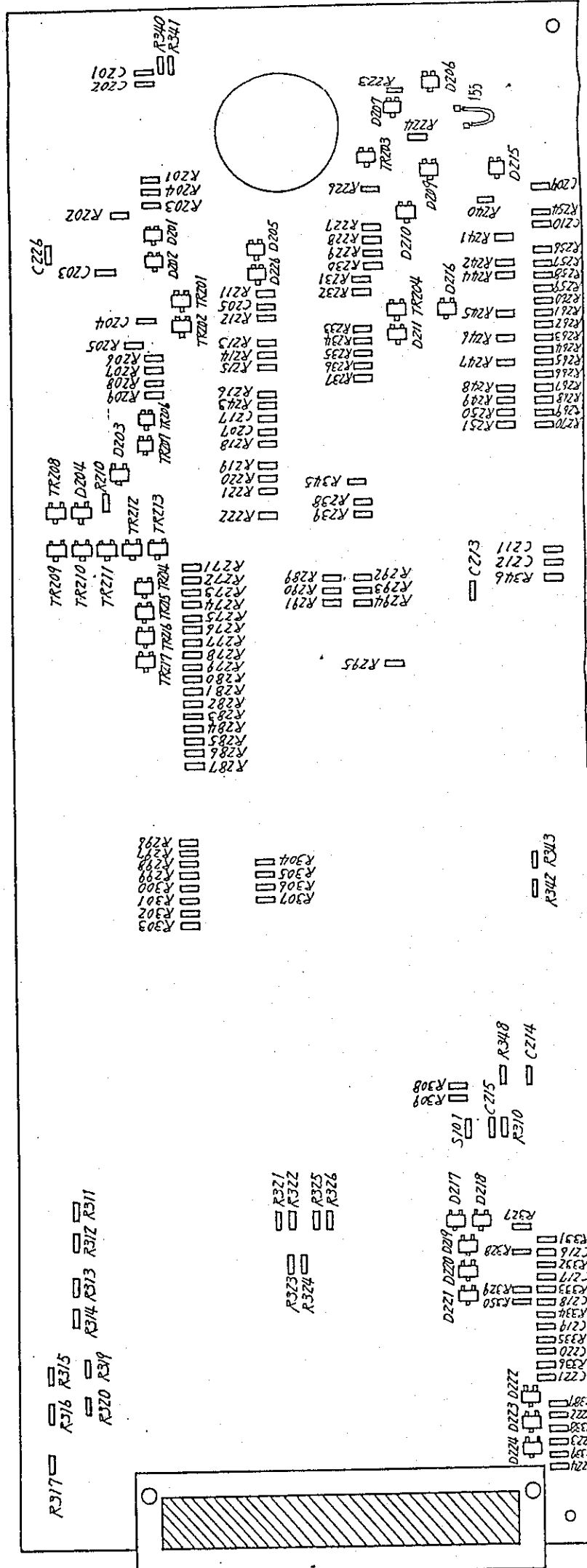
2-130

150



134, 2-135

147



154

| | |
|-------------|-------------------------------|
| PCB version | C15- side ΔΔΔ EP through hole |
| 8 | Jumper (PVC wire) |
| 9 | Pattern |
| Rev. No. | 3 |
| PCB version | 8, 9 |
| Remarks | 8 ECO ML200-098, 111 |
| | 9 ECO ML200-112 |

TBMB-2 Printed Circuit Board

(4YA042-1141G22) 1/2

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (1/9) REV. 3
PCB version 8, 9

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|--|----------------|------|---------|
| 1 | | TBMB-2-Printed circuit board (2 layer) | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | D24 | RD39F-B Zener DI | 613A2232L0322 | 1 | |
| 5 | D206 | MA3047-M/RD4.7M-B2 Zener DI (CP) | 613A0103M0102B | 1 | |
| 6 | D201 | MA3100/RD10M-B Zener DI (CP) | 613A0103M0182 | 1 | |
| 7 | D211 | MA3120 Zener DI (CP) | 613A0291M0202 | 1 | |
| 8 | D202 | MA3300/RD30M-B Zener DI (CP) | 613A0103M0292 | 1 | |
| 9 | D10-19, 203-205, 207, 209, 215, 216, 226 | MA151WK/DAN202K Signal DI (CP) | 611A0003N0003 | 18 | |
| 10 | | | | | |
| 11 | D3 | DFA1A1 Rectification DI | 610A0221L0021 | 1 | |
| 12 | D4-9, 20-23, 25 | EM1Z/SM-1A-02/DSA1A2 Rectification DI | 610A0003M0001 | 11 | |
| 13 | D26, 28, 29, 210, 217-224 | MA152WA Signal DI (CP) | 611A0029M0002 | 12 | |
| 14 | DA4, 6, 8, 10, 11 | D1CA20 Diode array | 761A2232M0401 | 5 | |
| 15 | DA2, 3, 5, 7, 9, 13 | D1CA20R Rectification diode | 610A3027M0001 | 6 | |
| 16 | | | | | |
| 17 | R317 | RM73B2B201J RN resistance (CP) | 323A5015J0201 | 1 | |
| 18 | R227, 228 | RM73B2B510J RN resistance (CP) | 323A5015J0510 | 2 | |
| 19 | R323 | RM73B2B221J RN resistance (CP) | 323A5015J0221 | 1 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (2/9) REV. 3
PCB version 8, 9

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|---|-----------------------------------|---------------|------|---------|
| 20 | R231,232 | RM73B2B154J RN resistance (CP) | 323A5015J0154 | 2 | |
| 21 | R324 | RM73B2B431J RN resistance (CP) | 323A5015J0431 | 1 | |
| 22 | R18,212,218,258 | RM73B2B511J RN resistance (CP) | 323A5015J0511 | 4 | |
| 23 | R211,217 | RM73B2B392J RN resistance (CP) | 323A5015J0392 | 2 | |
| 24 | R51,52,62-78,89, 113,203,210,215, 216,221,222, 236-240,280-287, 304-307,311-316, 319,320,340,341, 343,348 | RM73B2B102J RN resistance (CP) | 323A5015J0102 | 56 | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | R107,213,219 | RM73B2B122J RN resistance (CP) | 323A5015J0122 | 3 | |
| 30 | R19 | RM73B2B202J RN resistance (CP) | 323A5015J0202 | 1 | |
| 31 | R95,204,327-330 | RM73B2B222J RN resistance (CP) | 323A5015J0222 | 6 | |
| 32 | R205,254 | RM73B2B332J RN resistance (CP) | 323A5015J0332 | 2 | |
| 33 | R214,220 | RM73B2B472J RN resistance (CP) | 323A5015J0472 | 2 | |
| 34 | R29-32,88,112, 234,235,260,262, 264,266,296-303, 321,322,325,326, 342,346 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 26 | |
| 35 | | | | | |
| 36 | | | | | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (3/9) REV. 3
PCB version 8, 9

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|-----------------------------------|---------------|------|---------|
| 37 | R53-61,206-209, 243,256,271-279, 310,345 | RM73B2B562J RN resistance (CP) | 323A5015J0562 | 26 | |
| 38 | | | | | |
| 39 | R224 | RM73B2B561J RN resistance (CP) | 323A5015J0561 | 1 | |
| 40 | R85-87,90-94,97, 295,308,309 | RM73B2B103J RN resistance (CP) | 323A5015J0103 | 12 | |
| 41 | | | | | |
| 42 | R241 | RM73B2B393J RN resistance (CP) | 323A5015J0393 | 1 | |
| 43 | R229,230 | RM73B2B203J RN resistance (CP) | 323A5015J0203 | 2 | |
| 44 | R202,233,242 | RM73B2B223J RN resistance (CP) | 323A5015J0223 | 3 | |
| 45 | | | | | |
| 46 | R226,331-339 | RM73B2B124J RN resistance (CP) | 323A5015J0124 | 10 | |
| 47 | R201 | RM73B2B224J RN resistance (CP) | 323A5015J0224 | 1 | |
| 48 | R267-270 | RM73B2B511F RN resistance (CP) | 323A5015F0511 | 4 | |
| 49 | R259,265 | RM73B2B302F RN resistance (CP) | 323A5015F0302 | 2 | |
| 50 | R4,5,20,257 | RM73B2B242J RN resistance (CP) | 323A5015J0242 | 4 | |
| 51 | R261,263 | RM73B2B272F RN resistance (CP) | 323A5015F0272 | 2 | |
| 52 | R21,24,26,27,81, 82,291,294 | RM73B2B332F RN resistance (CP) | 323A5015F0332 | 8 | |
| 53 | | | | | |
| 54 | R80,83,289,293 | RM73B2B472F RN resistance (CP) | 323A5015F0472 | 4 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (4/9) REV. 3
PCB version 8, 9

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--|--|---------------|------|---------|
| 55 | R79,84,290,292 | RM73B2B123F RN resistance (CP) | 323A5015F0123 | 4 | |
| 56 | R244,247 | RM73B2B163F RN resistance (CP) | 323A5015F0163 | 2 | |
| 57 | R245,246,248-251 | RM73B2B363F RN resistance (CP) | 323A5015F0363 | 6 | |
| 58 | R22,28 | RM73B2B433F RN resistance (CP) | 323A5015F0433 | 2 | |
| 59 | | | | | |
| 60 | R7,8 | RSS1-68 Ω J RS resistance | 324A1012J0680 | 2 | |
| 61 | R110 | RD1/2Y2.2k Ω J RD resistance | 321A1431J0222 | 1 | |
| 62 | R11,13,14,16,17 | RD1/2Y3.9k Ω J RD resistance | 321A1431J0392 | 5 | |
| 63 | R98-106 | RD1/4Y5.1k Ω J RD resistance | 321A1421J0512 | 9 | |
| 64 | R33-50 | RD1/4Y3.6k Ω J RD resistance | 321A1421J0362 | 18 | |
| 65 | R6,12,15 | RNS1-0.51 Ω J RS resistance | 324A1012J0518 | 3 | |
| 66 | R223 | RM73B2B274J RN resistance (CP) | 323A5015J0274 | 1 | |
| 67 | | | | | |
| 68 | C33,34 | TCC45SL1H150JYA CC condenser | 302A1024K0150 | 2 | |
| 69 | C7,201,202 | CK3216B1H102K CK condenser (CP) | 303A6009K3102 | 3 | |
| 70 | C203,205,207 | CK3216B1H103K CK condenser (CP) | 303A6009K3103 | 3 | |
| 71 | C6,12-14,18,19, 24-32,209-224, 226 | CK3216F1H104Z CK condenser (CP) | 303A6009Z3104 | 32 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (5/9) REV. 3
PCB version 8, 9

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------|--|----------------|------|---------|
| 72 | | | | | |
| 73 | C1 | CEUSM1J330 CE condenser | 304A1041J1330 | 1 | |
| 74 | C3,16,17 | CEUSM1H4R7 CE condenser | 304A1041H1479 | 3 | |
| 75 | C5 | CEUSM1H100 CE condenser | 304A1041H1100 | 1 | |
| 76 | C204 | CC3216SL1H220J CE condenser (CP) | 303A3008K0220 | 1 | |
| 77 | | | | | |
| 78 | C11,15 | CEUSM1H102 CE condenser | 304A1041H1102 | 2 | |
| 79 | C20-23 | CQMFS92PP2A103F CQ condenser | 306A4103G2103 | 4 | |
| 80 | C35 | CEUSM1A221 CE condenser | 304A1041A1221 | 1 | |
| 81 | | | | | |
| 82 | Q13 | P8032AH MOS-CPU | 851A2152M0011 | 1 | |
| 83 | Q15 | MSM61048GS-VK MOS digital IC (FP) | 702A4924F0020 | 1 | |
| 84 | Q14 | MSM60769GS-VK MOS digital IC (FP) | 702A4924F7069V | 1 | |
| 85 | Q1 | HA13412 BIP linear system | 720A4021E0004 | 1 | |
| 86 | Q11 | MSM5128-20GS-VK (Special) MOS-S-RAM (SO) | 804A0024N4302Y | 1 | |
| 87 | Q2,8 | SN74LS05NS BIP digital IC (SO) | 700A0550N0005 | 2 | |
| 88 | Q5-7 | NJM2901M BIP linear system IC (SO) | 720A0528N0002 | 3 | |
| 89 | Q4 | SN74LS07NS BIP digital IC (SO) | 700A0550N0007 | 1 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (6/9) REV. 3
PCB version 8, 9

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------------------|--|----------------|------|---------|
| 90 | Q3 | SN74LS09NS BIP digital IC (SO) | 700A0550N0009 | 1 | |
| 91 | Q16 | P80C31BH-1/80C51F-49 MOS-CPU | 851A0103M0001 | 1 | |
| 92 | Q9,10 | MSM60366GS-VK MOS digital IC (FP) | 702A4924F3066V | 2 | |
| 93 | | | | | |
| 94 | | | | | |
| 95 | TR204 | 2SC3361/2SC2412K NPN-HF-TR (CP) | 602A1003N0002 | 1 | |
| 96 | TR2-11,201,202, 206-217 | 2SC3361 NPN-HF-TR (CP) | 602A1032N0002 | 24 | |
| 97 | TR12 | 2SB766A-Q/R PNP-LF-TR (CP) | 601A1130M0001 | 1 | |
| 98 | TR13-16 | 2SD1511 NPN-LF-TR (CP) | 603A1130N0003 | 4 | |
| 99 | TR203 | A1344/UN2111/DTA114K PNP-HF-TR (CP) | 600A1003N0003 | 1 | |
| 100 | TR1 | 2SA1488/2SB1185 PNP-HF-TR | 600A1203M0001 | 1 | |
| 101 | TRA1-11 | STA434A Transistor array | 760A4726M0001 | 11 | |
| 102 | | | | | |
| 103 | | | | | |
| 104 | Q12 | DL2-28A-05 IC socket | 245A1155P0280 | 1 | |
| 105 | | | | | |
| 106 | | | | | |
| 107 | S1,S101 | MCR18-JPW Chip jumper (CP) | 323A5011P0001 | 2 | |
| 108 | | | | | |
| 109 | S2 | U-type short wire | 5HK-31036-175 | 1 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (7/9) REV. 3
PCB version 8, 9

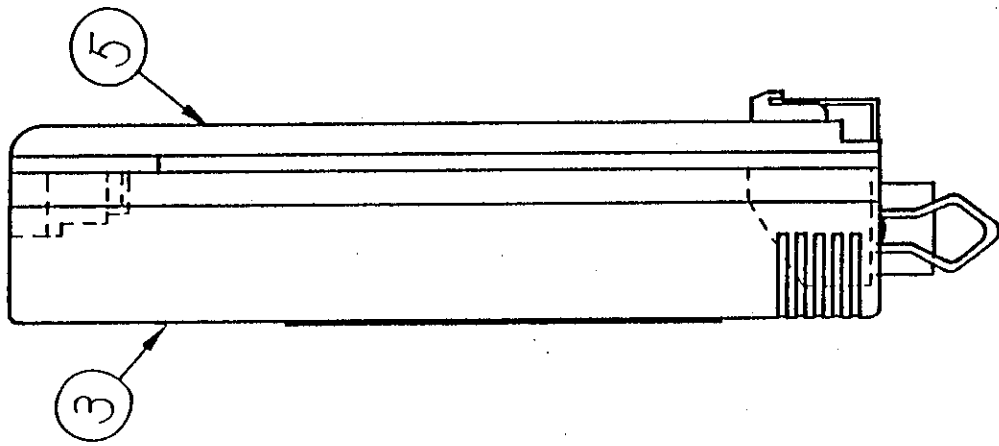
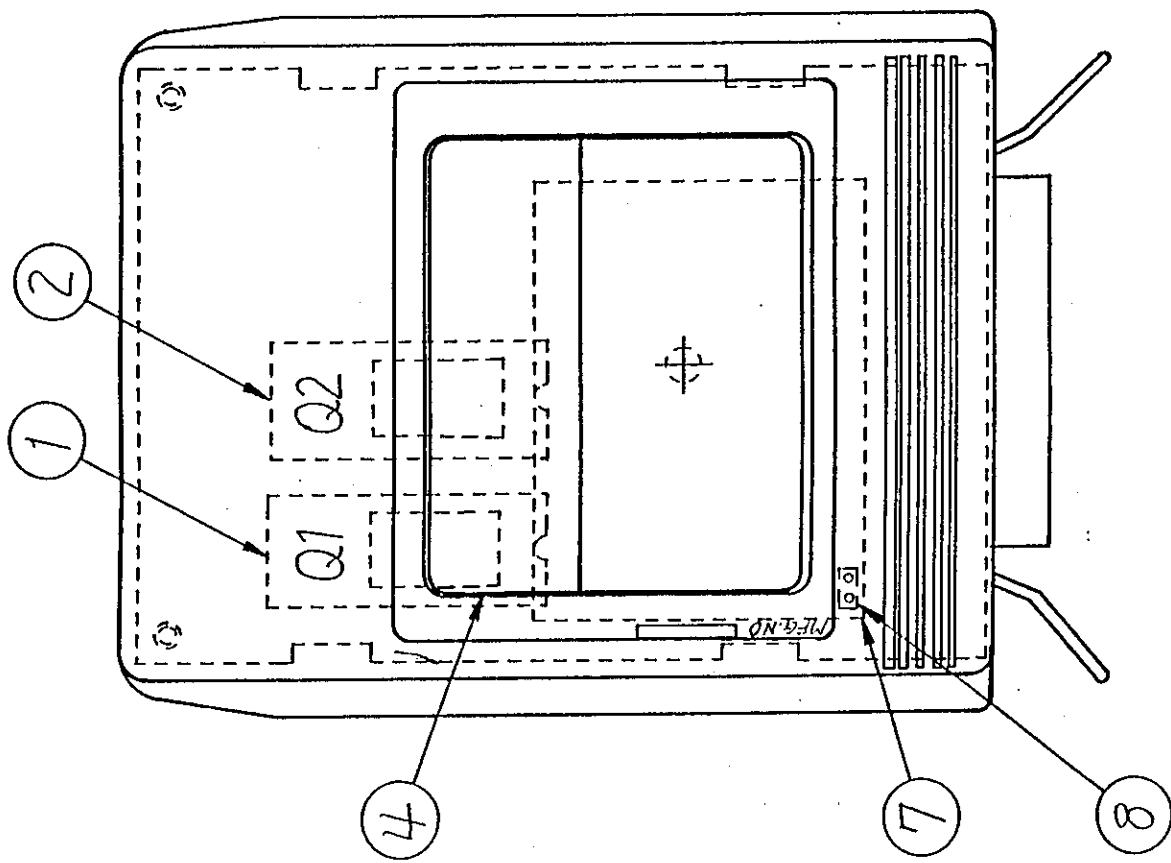
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|--|---------------|------|---------|
| 110 | CN4 | PD50A2X0 PC connector | 224A1160P0500 | 1 | |
| 111 | CN1 | ZC-014 PC connector | 224A3590P0140 | 1 | |
| 112 | CN2 | 1-172681-2 PC connector | 224A3462P0120 | 1 | |
| 113 | CN3 | 00-8272-244959762-06 PC connector | 224A3607P0440 | 1 | |
| 114 | CN6 | FFC-3TLAW1B FC connector | 225A3119P0030 | 1 | |
| 115 | CN5 | TCS7580-01-201 Round head connector | 221A1525P0081 | 1 | |
| 116 | | | | | |
| 117 | L1 | OL1614-102KR70(D) H coil | 353A3002K0102 | 1 | |
| 118 | | | | | |
| 119 | | | | | |
| 120 | OSC1 | FAR-C4SB11059000-M02 Oscillator | 4LP-12186-1 | 1 | |
| 121 | OSC2 | CSA16.000MX2 Ceramic oscillator | 381A1101B2005 | 1 | |
| 122 | | | | | |
| 123 | | | | | |
| 124 | PE | EE-SJ5-B Photocoupler | 652A0127M0009 | 1 | |
| 125 | | | | | |
| 126 | | | | | |
| 127 | BAT | CR2430 Battery | 4LP-45478 | 1 | |
| 128 | | | | | |
| 129 | | | | | |
| 130 | | FP-213 Fuse holder | 4LP-7142 | 2 | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (8/9) REV. 3
PCB version 8, 9

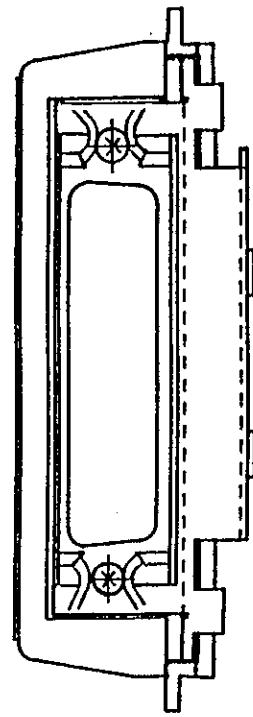
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------|----------------------------------|----------------------|------|---------|
| 131 | F1 | GG2-1/2 Fuse | 540A2036M1252 | 1 | |
| 132 | | | | | |
| 133 | | | | | |
| 134 | | Connector support bracket | 4PP4043- 1996P001 | 1 | |
| 135 | | P3055B Push rivet | 136A1180P0001 | 2 | |
| 136 | | | | | |
| 137 | FB1 | DST306-55F103Z EMI filter | 342A1004P2103 . | 1 | |
| 138 | | | | | |
| 139 | EB8,9-11 | Power bar | 4PP4044- 1632P001 | 4 | |
| 140 | EB3 | Power bar L=60.96 P=15.24 N=5 | 3LH-31313-4 | 1 | |
| 141 | EB14 | Power bar L=45.72 P=15.24 N=4 | 3LH-31313-5 | 1 | |
| 142 | EB5,6 | Power bar L=45.72 P=45.72 N=2 | 3LH-31313-85 | 2 | |
| 143 | EB1,2,12,13,15 | Power bar L=60.96 P=30.48 N=3 | 3LH-31313-96 | 5 | |
| 144 | EB4 | Power bar L=91.44 P=30.48 N=4 | 3LH-31313-86 | 1 | |
| 145 | | | | | |
| 146 | | | | | |
| 147 | | | | | |
| 148 | | | | | |
| 149 | | | | | |
| 150 | | Heat sink | 4PP4044- 1695P001 | 1 | |
| 151 | | | | | |

TBMB-2 Printed Circuit Board (4YA4021-1141G22) 2/2 (9/9) REV. 3
PCB version 8, 9

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-----------------------------------|------------------------|------|-----------------------------|
| 152 | | | | | |
| 153 | | Screw (pan-head SW with 2W) | +P(SW+2W) 2.5-6-HHC | 3 | |
| 154 | | Screw (pan-head SW with W) | +P(SW+W) 3-6-HHC | 1 | |
| 155 | | Heat resistance PVC wire 25 mm | LY-4658-1 | 1 | only PCB version 8 |
| 156 | | | | | |
| 157 | | | | | |
| 158 | | | | | |
| 159 | | | | | |
| 160 | | | | | |
| 161 | | | | | |
| 162 | | | | | |
| 164 | | | | | |
| 165 | | | | | |
| 166 | | | | | |
| 167 | | | | | |
| 168 | | | | | |



| G. No. | ROM No. | ROM code No. | Product name |
|--------|---------|--------------|--------------|
| G200 | Q2 | "67-1073" | 27256 |
| | Q1 | "67-1056" | 27256 |
| G201 | Q2 | "67-1074" | 27256 |
| | Q1 | "67-1057" | 27256 |
| G202 | Q2 | "67-1073" | 27256 |
| | Q1 | "67-1056" | 27256 |
| G203 | Q2 | "67-1074" | 27256 |
| | Q1 | "67-1057" | 27256 |
| G204 | Q2 | "67-1077" | 27256 |
| | Q1 | "67-1060" | 27256 |
| G205 | Q2 | "67-1078" | 27256 |
| | Q1 | "67-1061" | 27256 |
| G206 | Q2 | "67-1077" | 27256 |
| | Q1 | "67-1060" | 27256 |
| G207 | Q2 | "67-1078" | 27256 |
| | Q1 | "67-1061" | 27256 |



MLCE-Printed Circuit Board Assembly (4YA4042-1063G200)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1056G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1073G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P400 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1063G201)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1057G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1074G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P401 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1063G202)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1056G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1073G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P400 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1063G203)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1057G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1074G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P401 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1063G204) 2/2

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1060G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1077G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P400 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1063G205) 2/2

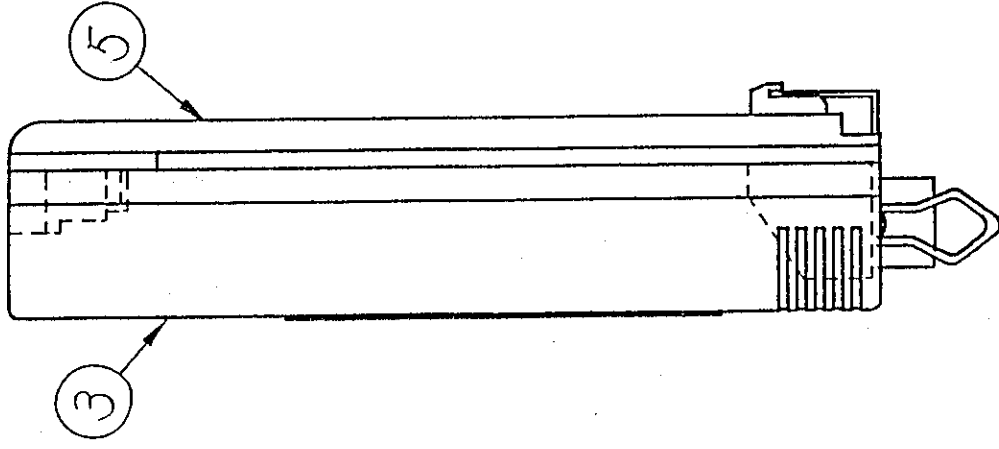
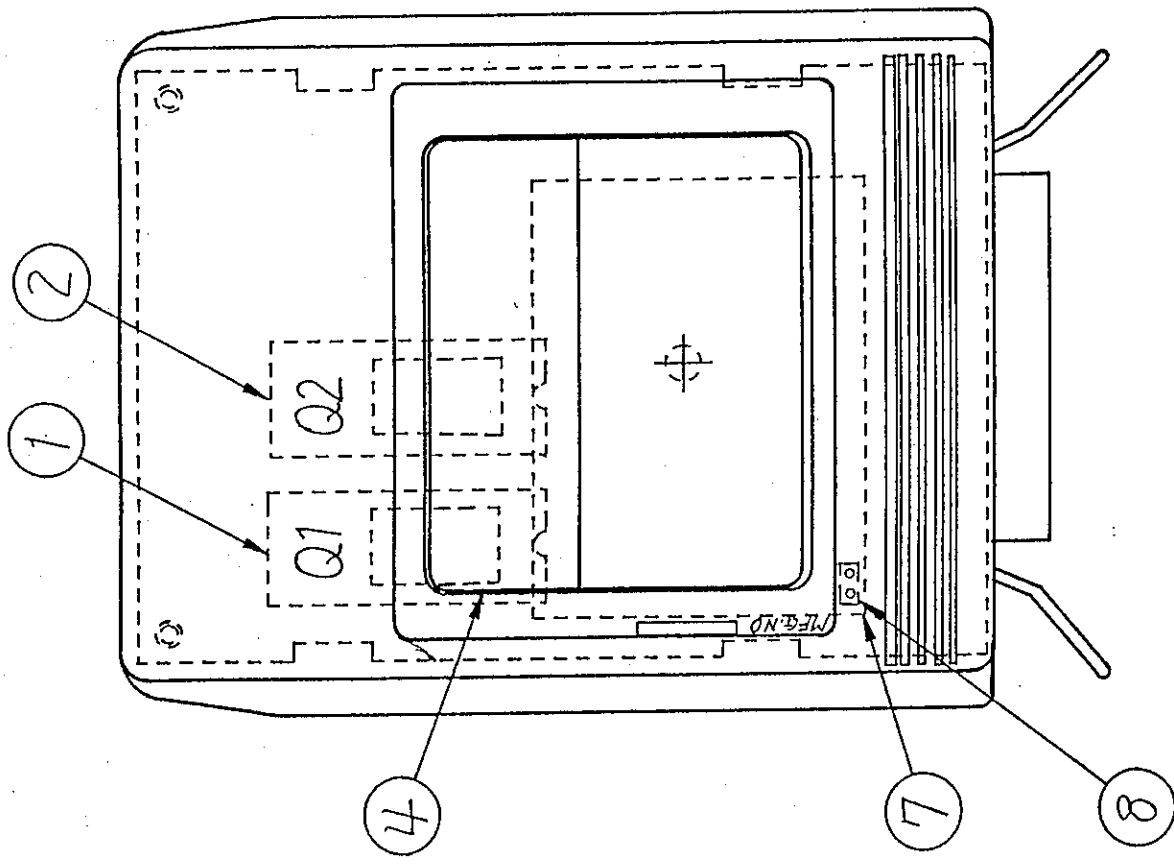
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1061G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1078G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P401 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1063G206) 2/2

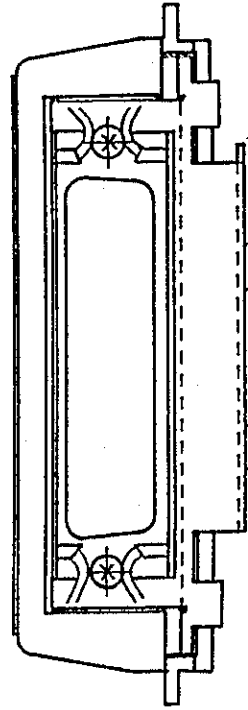
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1060G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1077G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P400 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1063G207) 2/2

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1061G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1078G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P401 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |



| G. No. | ROM No. | ROM code No. | Product name |
|--------|---------|--------------|--------------|
| G230 | | | |
| G231 | Q1 | "77-1056" | 27512 |
| G232 | Q1 | "77-1057" | 27512 |
| G233 | Q1 | "77-1056" | 27512 |
| G234 | Q1 | "77-1057" | 27512 |
| G235 | Q1 | "77-1058" | 27512 |
| G236 | Q1 | "77-1059" | 27512 |
| G237 | Q1 | "77-1058" | 27512 |
| | Q1 | "77-1059" | 27512 |



MLCE-Printed Circuit Board Assembly (4YA4042-1343G230) 2/2 REV. 3
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1056G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5422P400 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1343G231) 2/2 REV. 3
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1057G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5422P401 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1343G232) 2/2 REV. 3
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1056G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P400 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1343G233) 2/2 REV. 3
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1057G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P401 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1343G234) 2/2 REV. 3
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1058G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P400 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1343G235) 2/2 REV. 3
PCB version 6

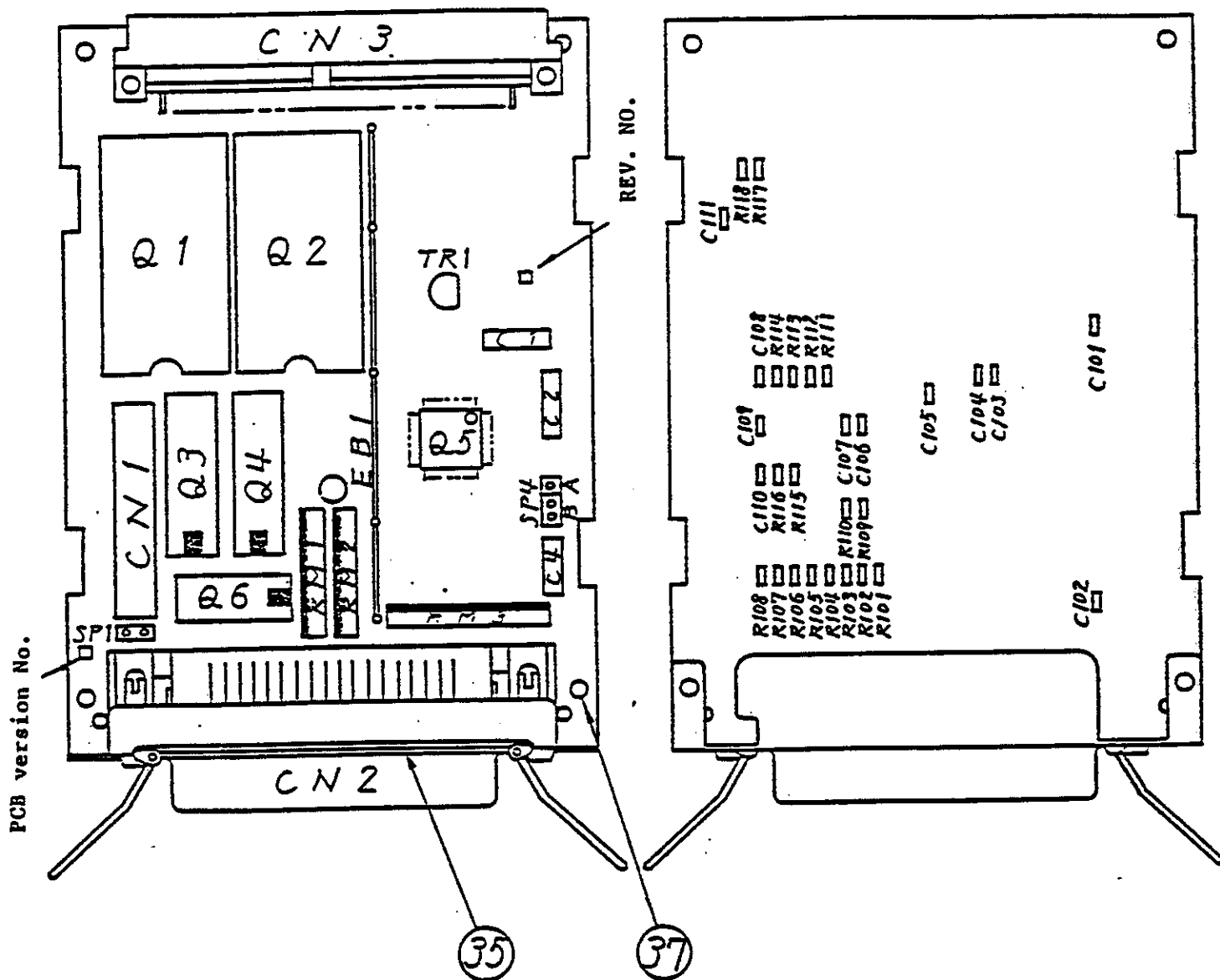
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1059G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P401 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1343G236) 2/2 REV. 3
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1058G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P400 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |

MLCE-Printed Circuit Board Assembly (4YA4042-1343G237) 2/2 REV. 3
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1059G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P401 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |
| 8 | | DIC-252 PC connector | 224A3182P0020 | 1 | |



| Part name | Rev. No. | PCB version No. | Remarks |
|-----------|----------|-----------------|----------------|
| MLCE- | 2 | 3 | 2YU5005-1051G1 |

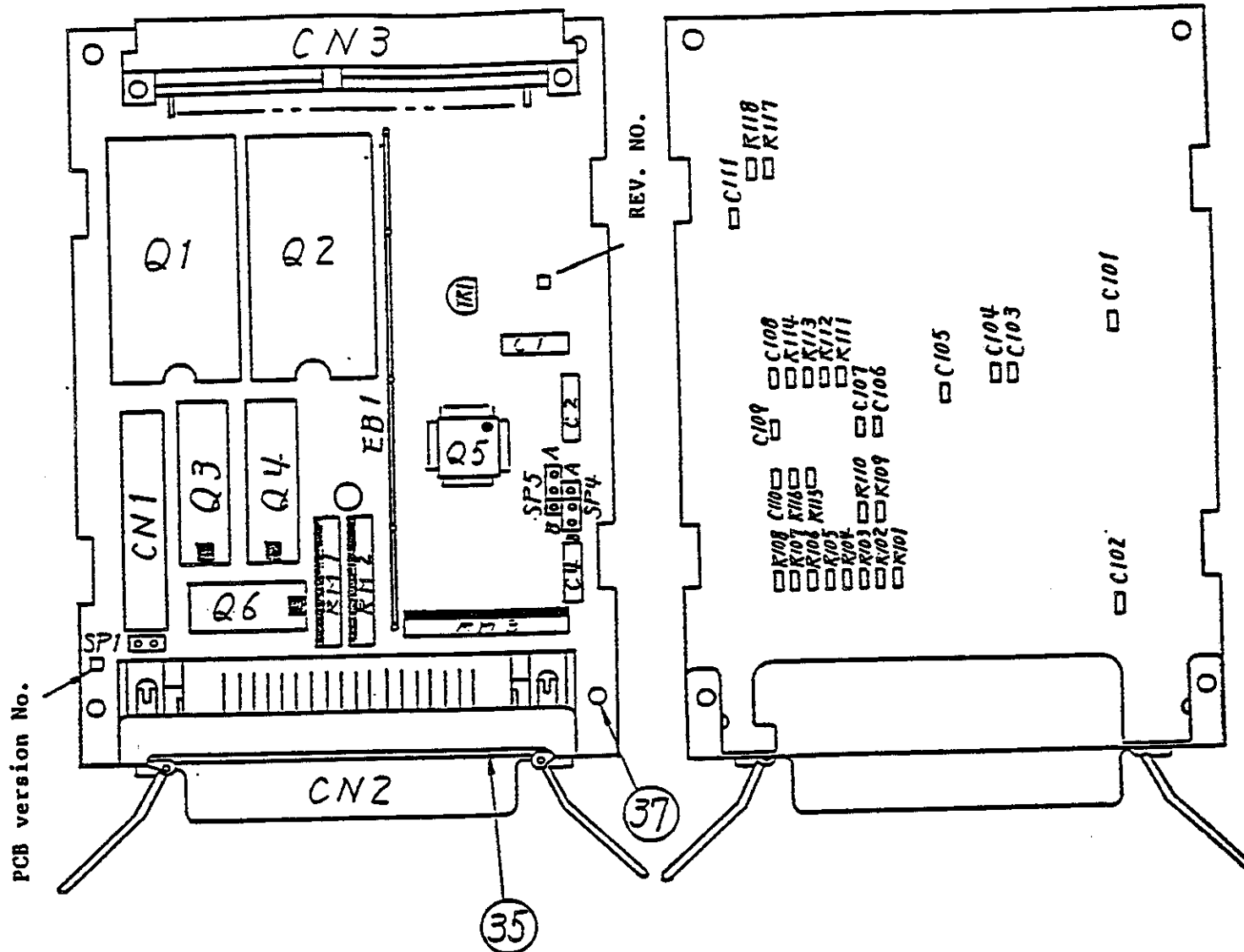
MLCE-Printed Circuit Board (4YA4042-1063Gxxx) 1/2

MLCE-Printed Circuit Board (4YA4042-1063Gxxx) 2/2 (1/2) REV. 2
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------------|---|---------------|------|---------|
| 1 | R109,110 | RM73B2B101J RN resistance (CP) | 323A5015J0101 | 2 | |
| 2 | R112,117,118 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 3 | |
| 3 | R101-108,111 | RM73B2B103J RN resistance (CP) | 323A5015J0103 | 10 | |
| 4 | R116 | RM73B2B300J RN resistance (CP) | 323A5015J0300 | 1 | |
| 5 | R113,114 | RM73B2B102J RN resistance (CP) | 323A5015J0102 | 2 | |
| 6 | RM3 | MR-8-332JA Block resistance | 334A3212J0332 | 1 | |
| 7 | RM2 | MR-6-332JG Block resistance | 334A3214J0332 | 1 | |
| 8 | RM1 | MR-6-332JG Block resistance | 334A3214J0102 | 1 | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | C101-104, 106-111 | CK3216B1H103K CK capacitor (CP) | 303A6009K3103 | 10 | |
| 12 | C105 | CK3216B1H102K CK capacitor (CP) | 303A6009K3102 | 1 | |
| 13 | C4 | TCK45F2E103ZYA 25V CK capacitor 10000P | 302A4027Z5103 | 1 | |
| 14 | C1,2 | CC45L1H561KYR CC capacitor | C4LP-8611-561 | 2 | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | Q3,4 | TMS4416-15NL MOS-D-RAM | 802A2050M6311 | 2 | |
| 18 | Q6 | 7406P BIP digital IC | 700A0003M0006 | 1 | |
| 19 | Q5 | MSM60360GS-VK MOS digital IC (FP) | 702A492F3060V | 1 | |
| 20 | Q1,2 | DL2-28A-05 | 245A1155P0280 | 2 | |
| 21 | | | | | |

MLCE-Printed Circuit Board (4YA4042-1063Gxxx) 2/2 (2/2) REV. 2
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|---|----------------------|------|---------|
| 22 | | | | | |
| 23 | TR1 | 2SC458/458K NPN-HF-TR | 602A1003M0003 | 1 | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | CN1 | HKP-26FD2 PC connector | 224A3131P0260 | 1 | |
| 27 | CN2 | 00-8346-3600-90-858 Angular head connector | 220A1615P0361 | 1 | |
| 28 | CN3 | 00-8272-244001112-05 PC connector | 224A3606P0440 | 1 | |
| 29 | | | | | |
| 30 | | | | | |
| 31 | SP1 | FFC-2AMEP1 FC connector | 225A3123P0020 | 1 | |
| 32 | SP4 | FFC-3AMEP1 FC connector | 225A3123P0030 | 5 | |
| 33 | SB4 | DIC-252 PC connector | 224A3182P0020 | 1 | |
| 34 | | | | | |
| 35 | | FG bracket (centro) | 4PP4043- 2263P001 | 1 | |
| 36 | | | | | |
| 37 | | Round head rivet | 4LB-180200-2 | 2 | |
| 38 | | | | | |
| 39 | EB1 | Power bar L=76.2 | 3LH-31313-62 | 1 | |



| Part name | Rev. No. | PCB version No. | Remarks |
|-----------|----------|-----------------|----------------|
| MLCE- | 2 | 4 | 2YU5005-1051G1 |

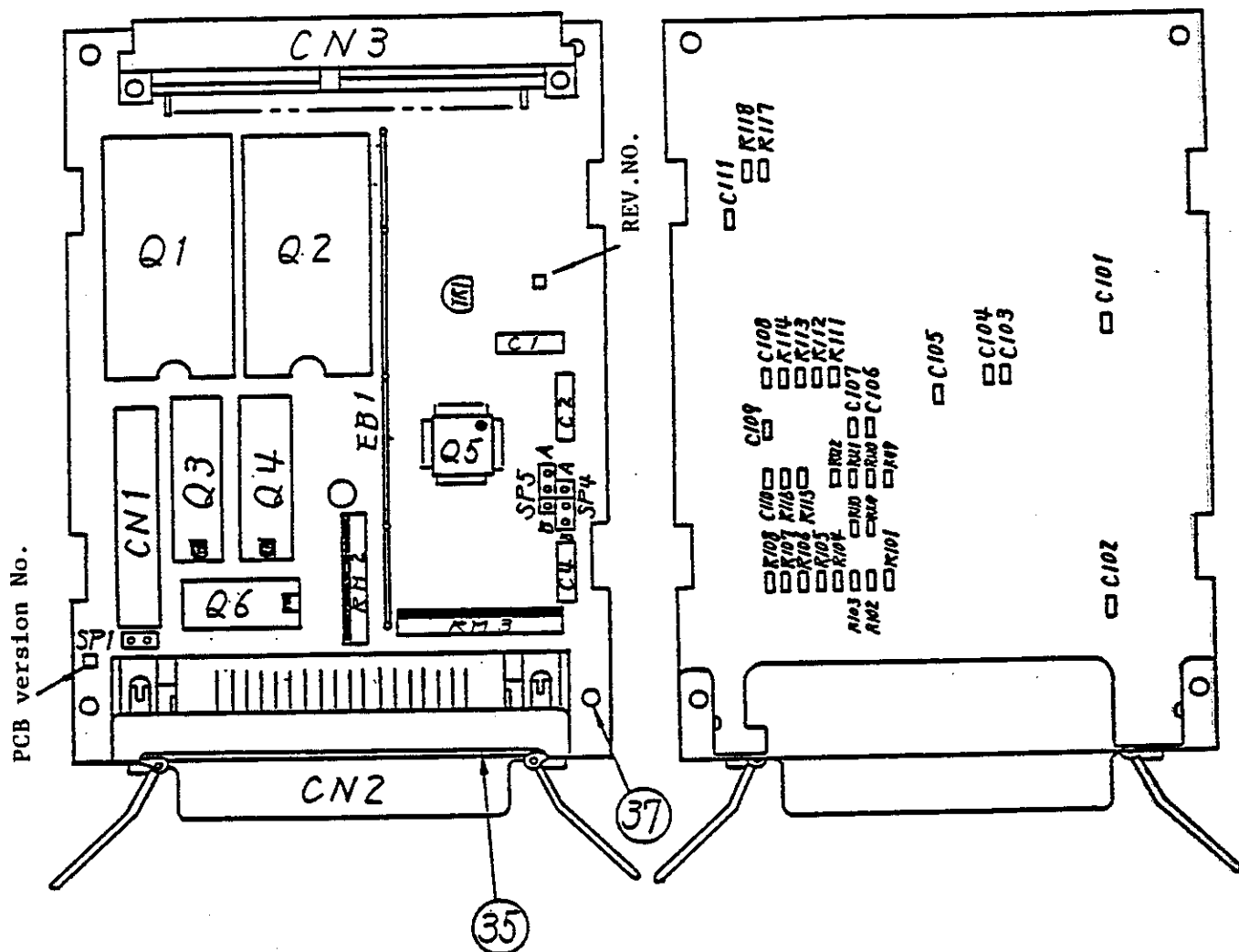
MLCE-Printed Circuit Board (4YA4042-1063Gxxx) 1/2

MLCE-Printed Circuit Board (4YA4042-1063Gxxx) 2/2 (1/2) REV. 2
PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|-----------------------|--|----------------|------|---------|
| 1 | R109,110 | RM73B2B101J RN resistance (CP) | 323A5015J0101 | 2 | |
| 2 | R112,117,118 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 3 | |
| 3 | R101-108,111, 115 | RM73B2B103J RN resistance (CP) | 323A5015J0103 | 10 | |
| 4 | R116 | RM73B2B300J RD resistance | 323A5015J0300 | 1 | |
| 5 | R113,114 | RM73B2B102J RN resistance (CP) | 323A5015J0102 | 1 | |
| 6 | RM3 | MR-8-332JA Block resistance | 334A3212J0332 | 1 | |
| 7 | RM2 | MR-6-332JG Block resistance | 334A3214J0332 | 1 | |
| 8 | RM1 | MR-6-102JG Block resistance | 334A3214J0102 | 1 | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | C101-104, C106-111 | CK3216B1H103K CK capacitor (CP) | 303A6009K3103 | 10 | |
| 12 | C105 | CK3216B1H102K2M50 CK capacitor (CP) | 303A6009K3102 | 1 | |
| 13 | C4 | TCK45F2E103ZYA 250V CK capacitor 10000P | 302A4027Z5103 | 1 | |
| 14 | C1,2 | CC45L1H561KYR 250V CC capacitor | C4LP-8611-561 | 2 | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | Q3,4 | TMS4416-15NL MOS-DRAM | 802A2050M6311 | 2 | |
| 18 | Q6 | 7406P BIP digital IC | 700A0003M0006 | 1 | |
| 19 | Q3 | MSM60360GS-VK MOS digital IC (FP) | 702A4924F3060V | 1 | |
| 20 | Q1,2 | DL2-28A-05 IC socket | 245A1155P0280 | 2 | |
| 21 | | | | | |

MLCE-Printed Circuit Board (4YA4042-1063Gxxx) 2/2 (2/2) REV. 2
PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|---|----------------------|------|---------|
| 22 | | | | | |
| 23 | TR1 | 2SC458/458K NPN-HF-TR | 602A1003M0003 | 1 | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | CN1 | HKP-26FD2 PC connector | 224A3131P0260 | 1 | |
| 27 | CN2 | 00-8346-3600-90-858 Angular head connector | 220A1615P0362 | 1 | |
| 28 | CN3 | 00-8272-244001112-05 PC connector | 224A3606P0440 | 1 | |
| 29 | | | | | |
| 30 | | | | | |
| 31 | SP1 | FFC-2AMEP1 FC connector | 225A3123P0020 | 1 | |
| 32 | SP4,5 | FFC-3AMEP1 FC connector | 225A3123P0030 | 2 | |
| 33 | SB4,5 | DIC-252 PC connector | 224A3182P0020 | 2 | |
| 34 | | | | | |
| 35 | | FG bracket (centro) | 4PP4043- 2263P001 | 1 | |
| 36 | | | | | |
| 37 | | Round head rivet | 4LB-180200-2 | 2 | |
| 38 | | | | | |
| 39 | EB1 | Power bar L=76.2 | 3LH-31313-62 | 1 | |



| Part name | Rev. No. | PCB version No. | Remarks |
|-----------|----------|-----------------|----------------|
| MLCE- | 2 | 5 | 2YU5005-1051G1 |

MLCE-Printed Circuit Board (4YA4042-1063Gxxx) 1/2

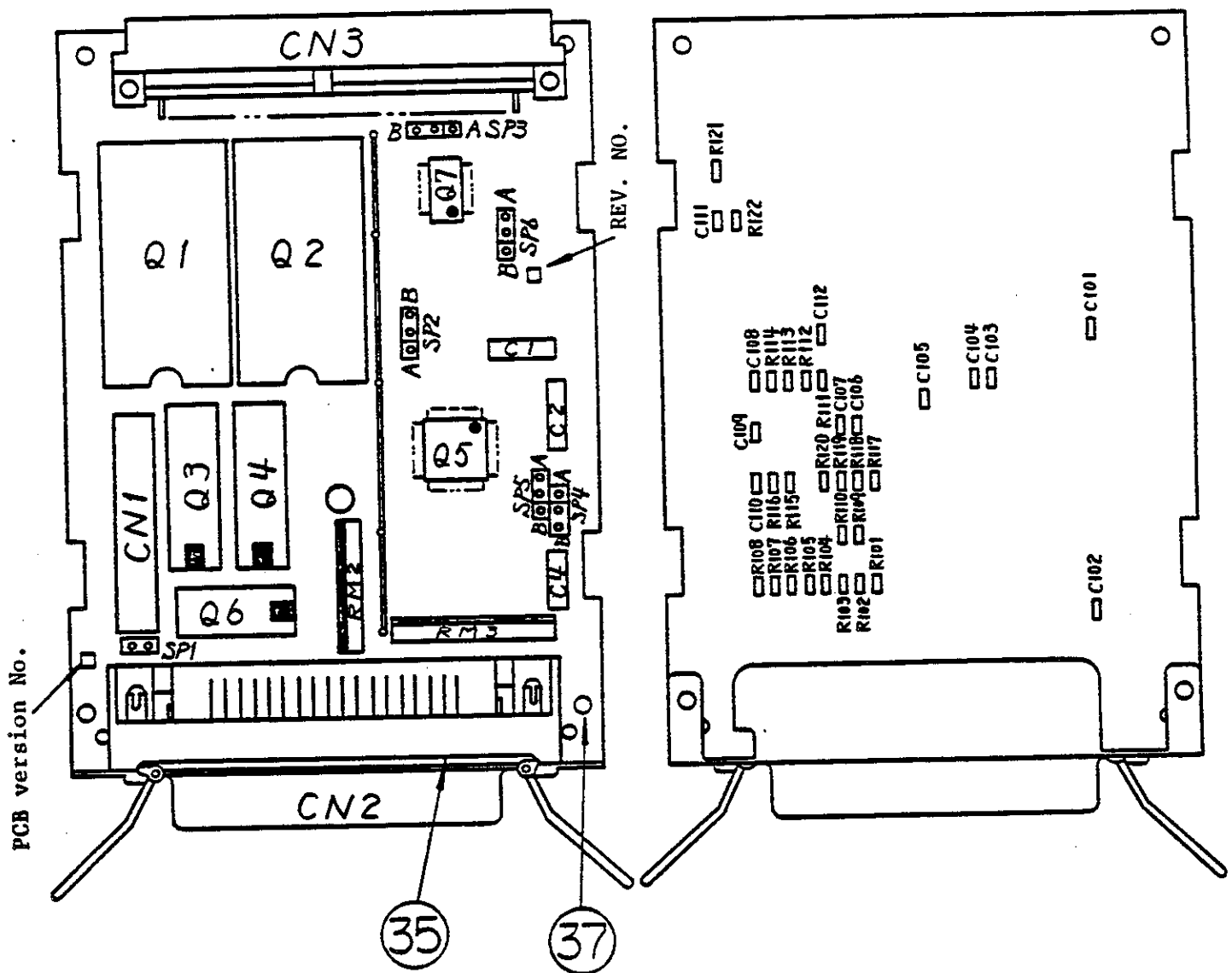
MLCE-Printed Circuit Board (4YA4042-1063Gxxx) 2/2 (1/2) REV. 2

PCB version 5

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|-----------------------|--|----------------|------|---------|
| 1 | R109,110 | RM73B2B101J RN resistance (CP) | 323A5015J0101 | 2 | |
| 2 | R112,117,118 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 3 | |
| 3 | R101-108,111, 115 | RM73B2B103J RN resistance (CP) | 323A5015J0103 | 10 | |
| 4 | R116 | RM73B2B300J RN resistance (CP) | 323A5015J0300 | 1 | |
| 5 | R113,114,120 | RM73B2B102J RN resistance (CP) | 323A5015J0102 | 3 | |
| 6 | R119,121,122 | RM73B2B332J RN resistance (CP) | 323A5015J0332 | 3 | |
| 7 | RM3 | MR-8-332JA Block resistance | 334A3212J0332 | 1 | |
| 8 | RM2 | MR-6-332JG Block resistance | 334A3214J0332 | 1 | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | C101-104, C106-111 | CK3216B1H103K CK capacitor (CP) | 303A6009K3103 | 10 | |
| 12 | C105 | CK3216B1H102K2M50 CK capacitor (CP) | 303A6009K3102 | 1 | |
| 13 | C4 | TCK45F2E103ZYA 250V CK capacitor 10000P | 302A4027Z5103 | 1 | |
| 14 | C1,2 | CC45L1H561KYR 250V CC capacitor | C4LP-8611-561 | 2 | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | Q3,4 | TMS4416-15NL MOS-DRAM | 802A2050M6311 | 2 | |
| 18 | Q6 | 7406P BIP digital IC | 700A0003M0006 | 1 | |
| 19 | Q5 | MSM60360GS-VK MOS digital IC (FP) | 702A4924F3060V | 1 | |
| 20 | Q1,2 | DL2-28A-05 IC socket | 245A1155P0280 | 2 | |
| 21 | | | | | |

MLCE-Printed Circuit Board (4YA4042-1063Gxxx) 2/2 (2/2) REV. 2
PCB version 5

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|---|----------------------|------|---------|
| 22 | | | | | |
| 23 | TR1 | 2SC458/458K NPN-HF-TR | 602A1003M0003 | 1 | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | CN1 | HKP-26FD2 PC connector | 224A3131P0260 | 1 | |
| 27 | CN2 | 00-8346-3600-93-858 Angular head connector | 220A1615P0362 | 1 | |
| 28 | CN3 | 00-8272-244001112-05 PC connector | 224A3606P0440 | 1 | |
| 29 | | | | | |
| 30 | | | | | |
| 31 | SP1 | FFC-2AMEP1 FC connector | 225A3123P0020 | 1 | |
| 32 | SP4,5 | FFC-3AMEP1 FC connector | 225A3123P0030 | 2 | |
| 33 | SB4,5 | DIC-252 PC connector | 224A3182P0020 | 2 | |
| 34 | | | | | |
| 35 | | FG bracket (centro) | 4PP4043- 2263P001 | 1 | |
| 36 | | | | | |
| 37 | | Round head rivet | 4LB-180200-2 | 2 | |
| 38 | | | | | |
| 39 | EB1 | Power bar L=76.2 | 3LH-31313-62 | 1 | |



| Part name | Rev. No. | PCB version No. | Remarks |
|-----------|----------|-----------------|----------------|
| MLCE | 3 | 6 | 2YU5005-1051G1 |

MLCE-Printed Circuit Board (4YA4042-1343Gxxx) 1/2 (2/2)

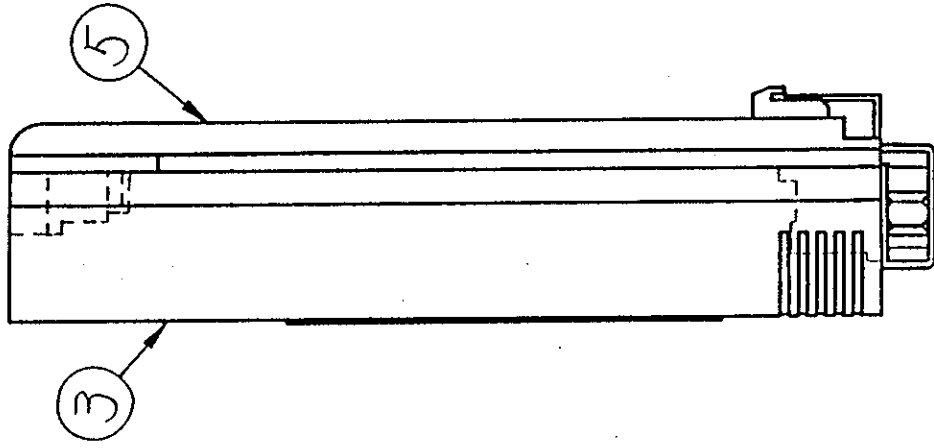
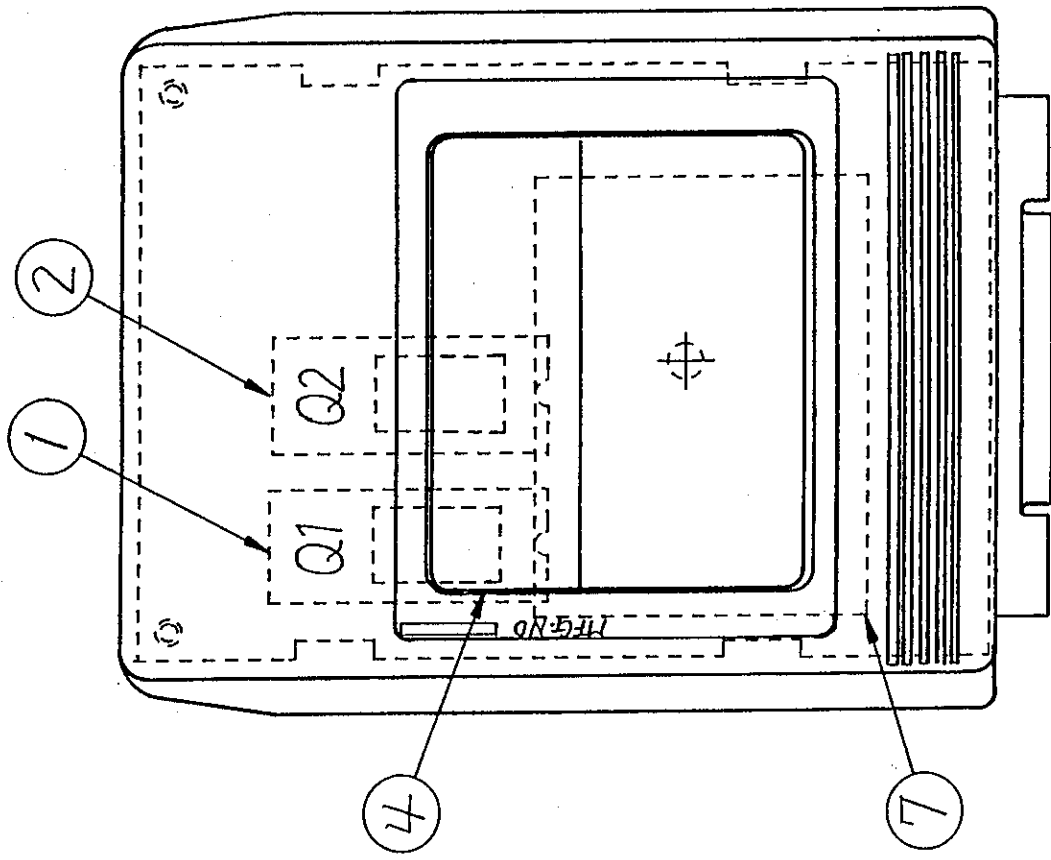
MLCE-Printed Circuit Board (4YA4042-1343Gxxx) 2/2 (1/2) REV. 3

PCB version 6

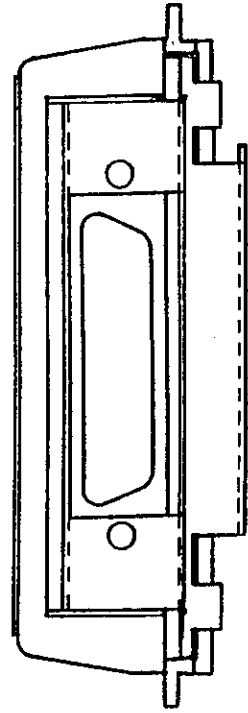
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|----------------------|--|----------------|------|---------|
| 1 | R109,110 | RM73B2B101J RN resistance (CP) | 323A5015J0101 | 2 | |
| 2 | R112,121,122 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 3 | |
| 3 | R101-108,111, 115 | RM73B2B103J RN resistance (CP) | 323A5015J0103 | 10 | |
| 4 | R116 | RM73B2B300J RN resistance (CP) | 323A5015J0300 | 1 | |
| 5 | R113,114,118 | RM73B2B102J RN resistance (CP) | 323A5015J0102 | 3 | |
| 6 | R117,119,120 | RM73B2B332J RN resistance (CP) | 323A5015J0332 | 3 | |
| 7 | RM3 | MR-8-332JA Block resistance | 334A3212J0332 | 1 | |
| 8 | RM2 | MR-6-332JG Block resistance | 334A3214J0332 | 1 | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | C101-104, 106-111 | CK3216B1H103K CK condenser (CP) | 303A6009K3103 | 10 | |
| 12 | C105 | CK3216B1H102K CK condenser (CP) | 303A6009K3102 | 1 | |
| 13 | C4 | TCK45F2E103ZYA 250V CK condenser 10000P | 302A4027Z5103 | 1 | |
| 14 | C1,2 | CC45L1H561KYR CC condenser | C4LP-8611-561 | 2 | |
| 15 | C112 | CC3216SL1H220J CC condenser (CP) | 303A3008K0220 | 1 | |
| 16 | | | | | |
| 17 | Q3,4 | TMS4416-15NL MOS-D-RAM | 802A2050M6311 | 2 | |
| 18 | Q6 | 7406P BIP digital IC | 700A0003M0006 | 1 | |
| 19 | Q5 | MSM60360GS-VK MOS digital IC (FP) | 702A4924F3060V | 1 | |
| 20 | Q1,2 | DL2-28A-05 IC socket | 245A1155P0280 | 2 | |
| 21 | Q7 | 74LS02FP BIP digital IC (FP) | 700A0503N0002 | 1 | |

MLCE-Printed Circuit Board (4YA4042-1343Gxxx) 2/2 (2/2) REV. 3
PCB version 6

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|---|----------------------|------|---------|
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | CN1 | HKP-26FD2 PC connector | 224A3131P0260 | 1 | |
| 27 | CN2 | 00-8346-3600-93-858 Angular head connector | 220A1615P0362 | 1 | |
| 28 | CN3 | 00-8272-244001112-05 PC connector | 224A3606P0440 | 1 | |
| 29 | | | | | |
| 30 | | | | | |
| 31 | SP1 | FFC-2AMEP1 FC connector | 225A3123P0020 | 1 | |
| 32 | SP2-6 | FFC-3AMEP1 FC connector | 225A3123P0030 | 5 | |
| 33 | SB2-6 | DIC-252 PC connector | 224A3182P0020 | 5 | |
| 34 | | | | | |
| 35 | | FG bracket (centro) | 4PP4043- 2263P001 | 1 | |
| 36 | | | | | |
| 37 | | Round head rivet | 4LB-180200-2 | 2 | |
| 38 | | | | | |
| 39 | EB1 | Power bar L=76.2 | 3LH-31313-62 | 1 | |



| G. No. | ROM No. | ROM code No. | Product name |
|--------|---------|--------------|--------------|
| G200 | Q2 | "67-1073" | 27256 |
| | Q1 | "67-1056" | 27256 |
| G201 | Q2 | "67-1074" | 27256 |
| | Q1 | "67-1057" | 27256 |
| G202 | Q2 | "67-1073" | 27256 |
| | Q1 | "67-1056" | 27256 |
| G203 | Q2 | "67-1074" | 27256 |
| | Q1 | "67-1057" | 27256 |
| G204 | Q2 | "67-1077" | 27256 |
| | Q1 | "67-1060" | 27256 |
| G205 | Q2 | "67-1078" | 27256 |
| | Q1 | "67-1061" | 27256 |
| G206 | Q2 | "67-1077" | 27256 |
| | Q1 | "67-1060" | 27256 |
| G207 | Q2 | "67-1078" | 27256 |
| | Q1 | "67-1061" | 27256 |



MLRC-Printed Circuit Board Assembly (4YA4042-1064G200)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1056G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1073G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P500 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | | | 1 | |

MLRC-Printed Circuit Board Assembly (4YA4042-1064G201)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1057G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1074G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P501 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | | | | |

MLRC-Printed Circuit Board Assembly (4YA4042-1064G202)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1056G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1073G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P500 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLRC-Printed Circuit Board Assembly (4YA4042-1064G203)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1057G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1074G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P501 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLRC-Printed Circuit Board Assembly (4YA4042-1064G204) 2/2

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1060G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1077G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P500 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | | | | |

MLRC-Printed Circuit Board Assembly (4YA4042-1064G205) 2/2

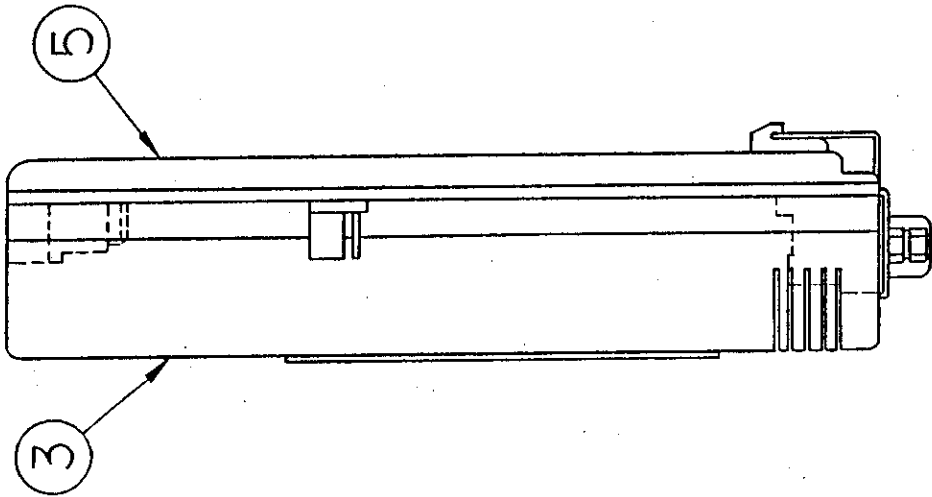
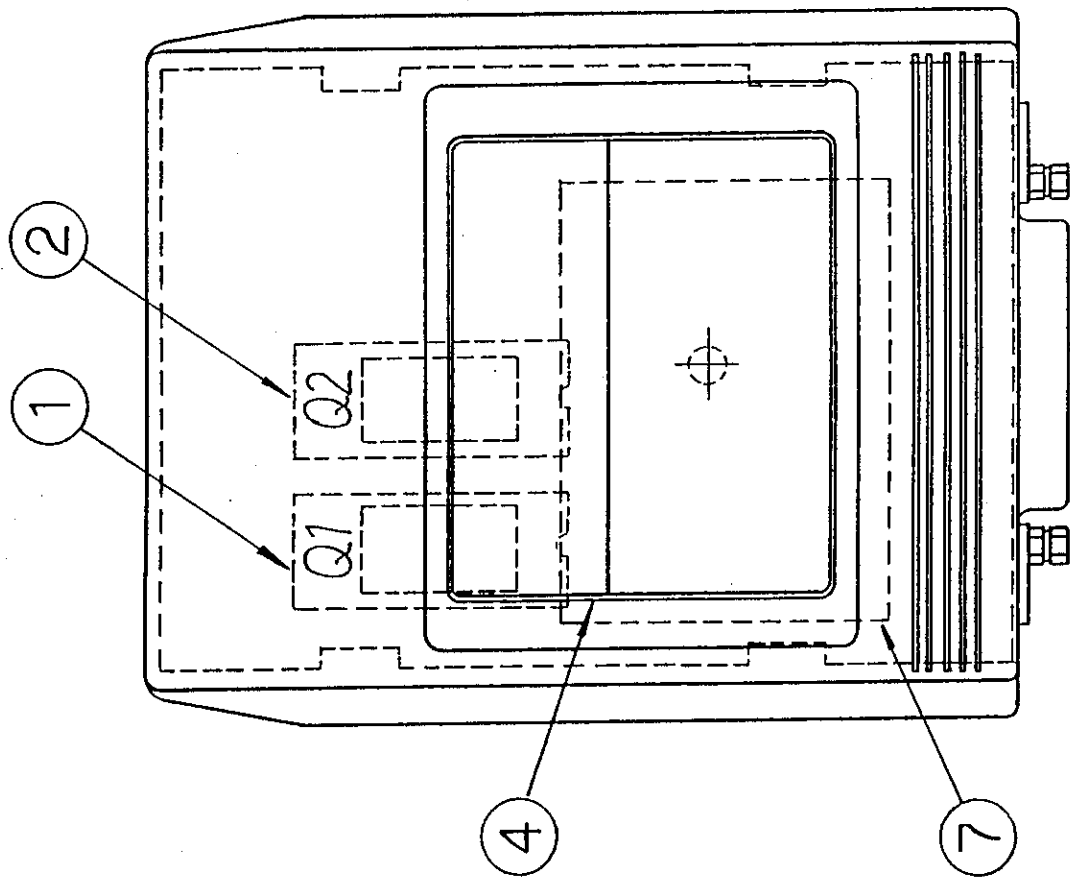
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1061G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1078G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P501 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | | | | |

MLRC-Printed Circuit Board Assembly (4YA4042-1064G206) 2/2

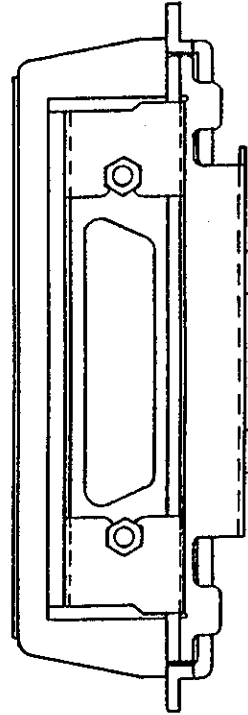
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1060G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1077G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P500 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLRC-Printed Circuit Board Assembly (4YA4042-1064G207) 2/2

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1061G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1078G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P201 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |



| G. No. | ROM No. | ROM code No. | Product name |
|--------|---------|--------------|--------------|
| G230 | | | |
| | Q1 | "77-1056" | 27512 |
| G231 | | | |
| | Q1 | "77-1057" | 27512 |
| G232 | | | |
| | Q1 | "77-1056" | 27512 |
| G233 | | | |
| | Q1 | "77-1057" | 27512 |
| G234 | | | |
| | Q1 | "77-1058" | 27512 |
| G235 | | | |
| | Q1 | "77-1059" | 27512 |
| G236 | | | |
| | Q1 | "77-1058" | 27512 |
| G237 | | | |
| | Q1 | "77-1059" | 27512 |



MLRC-Printed Circuit Board Assembly (4YA4042-1344G230) 2/2 REV. 3
PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1056G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P500 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | | | | |

MLRC-Printed Circuit Board Assembly (4YA4042-1344G231) 2/2 REV. 3
PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1057G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P501 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | | | | |

MLRC-Printed Circuit Board Assembly (4YA4042-1344G232) 2/2 REV. 3
PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1056G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5422P500 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLRC-Printed Circuit Board Assembly (4YA4042-1344G233) 2/2 REV. 3
PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1057G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5422P501 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLRC-Printed Circuit Board Assembly (4YA4042-1344G234) 2/2 REV. 3
PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1058G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P500 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | | | | |

MLRC-Printed Circuit Board Assembly (4YA4042-1344G235) 2/2 REV. 3
PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1059G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P501 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | | | | |

MLRC-Printed Circuit Board Assembly (4YA4042-1344G236) 2/2 REV. 3

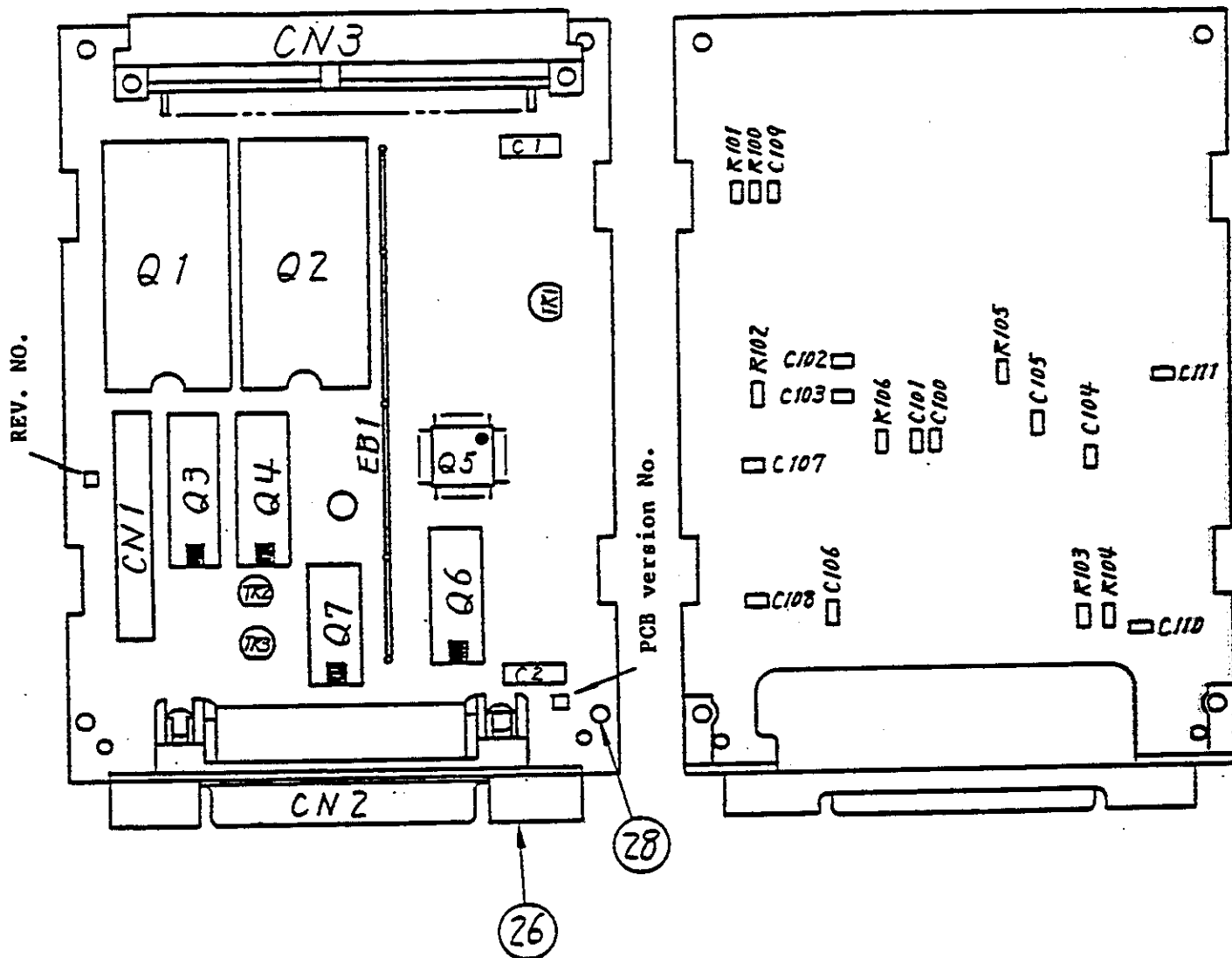
PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1058G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P500 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLRC-Printed Circuit Board Assembly (4YA4042-1344G237) 2/2 REV. 3

PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1059G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P501 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3146P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |



| Part name | Rev. No. | PCB version No. | Remarks |
|-----------|----------|-----------------|----------------|
| MLRC- | 2 | 3 | 2YU5005-1052G1 |

MLRC-Printed Circuit Board (4YA4042-1064Gxxx) 1/2

MLRC-Printed Circuit Board (4YA4042-1064Gxxx) 2/2 (1/2) REV. 2
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------------|---|----------------|------|---------|
| 1 | R100,103 | RM73B2B362J RN resistance (CP) | 323A5015J0362 | 2 | |
| 2 | R101,104 | RM73B2B202J RN resistance | 323A5015J0202 | 2 | |
| 3 | R102,105,106 | RM73B2B512J RN resistance | 323A5015J0512 | 3 | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | C100-111 | CK3216B1H103K CK capacitor (CP) | 303A6009K3103 | 12 | |
| 7 | C2 | TCK45F2E103ZYA 250V CK capacitor 10000P | 302A4027Z5103 | 1 | |
| 8 | C1 | CC45L1H561KYR CC capacitor | C4LP-8611-561 | 1 | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | Q3,4 | TMS4416-15NL MOS-D-RAM | 802A2050M6311 | 2 | |
| 12 | Q7 | 75188P BIP-INF-IC | 710A0003M0188 | 1 | |
| 13 | Q6 | 75154P BIP-INF-IC | 710A0003M0154 | 1 | |
| 14 | Q5 | MSM60360GS-VK MOS digital IC (FP) | 702A4924F3060V | 1 | |
| 15 | Q1,2 | DL2-28A-05 IC socket | 245A1155P0280 | 4 | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | TR2 | 2SC458/458K NPN-HF-TR | 602A1003M0003 | 1 | |
| 19 | TR1,3 | 2SA952 PNP-HF-TR | 600A1123M0014 | 2 | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | CN1 | HKP-26FD2 PC connector | 224A3131P0260 | 1 | |
| 23 | CN2 | D25S-LLD-Hexagonal (#4-40) Angular head connector | 220A121P0250 | 1 | |

MLRC-Printed Circuit Board (4YA4042-1064Gxxx) 2/2 (2/2) REV. 2
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|--------------------------------------|----------------------|------|---------|
| 24 | CN3 | 00-8272-244001112-05 PC connector | 224A3606P0440 | 1 | |
| 25 | | | | | |
| 26 | | FG bracket (RS-232C) | 3PP4043- 2264P002 | 1 | |
| 27 | | | | | |
| 28 | | Round head rivet | 4LB-180200-2 | 2 | |
| 29 | | | | | |
| 30 | | | | | |
| 31 | | | | | |
| 32 | | | | | |
| 33 | | Power bar L=76.2 | 3LH-31313-62 | 1 | |

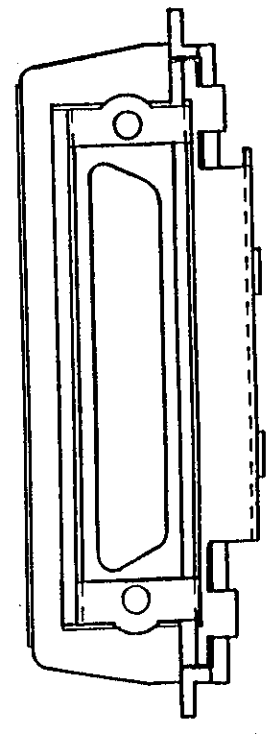
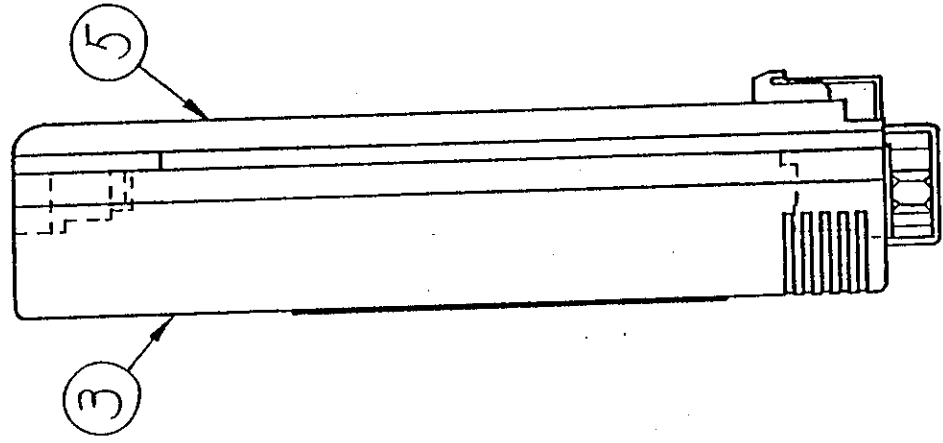
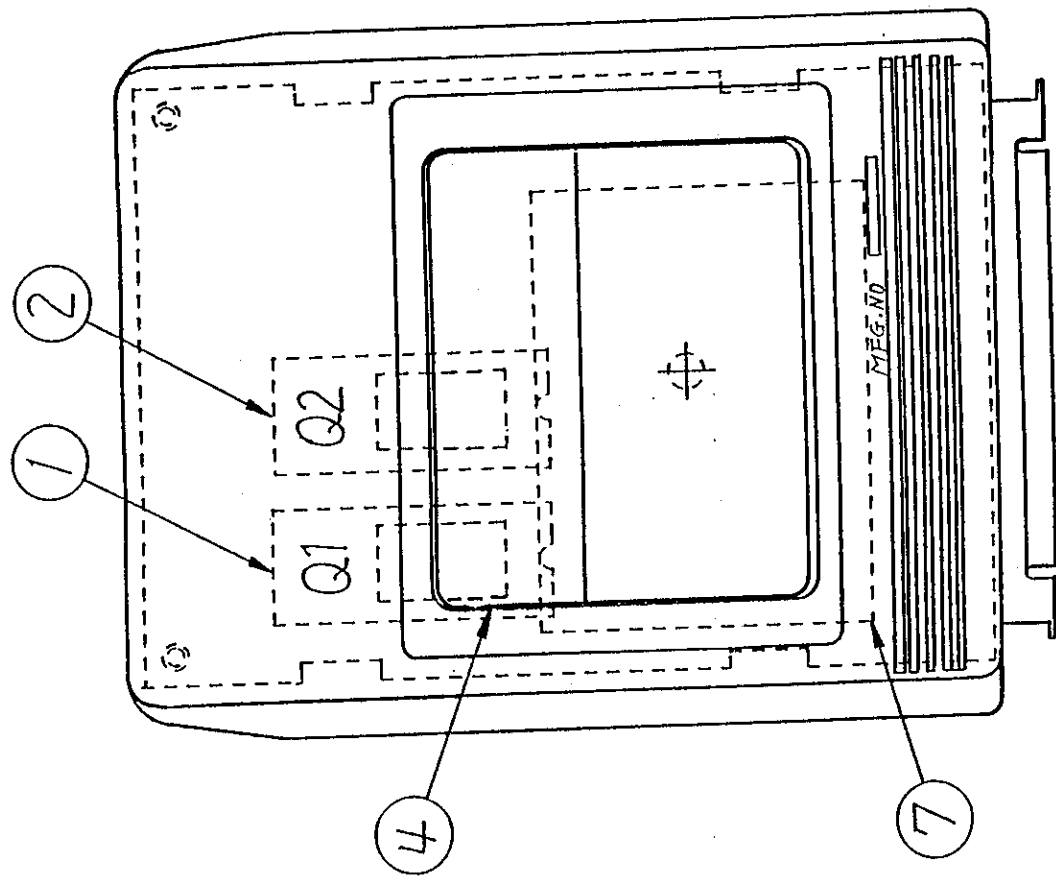
MLRC-Printed Circuit Board (4YA4042-1344Gxxx) 2/2 (1/2) REV. 3
PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|-------------------------|---|----------------|------|---------|
| 1 | R100,103 | RM73B2B362J RN resistance (CP) | 323A5015J0362 | 2 | |
| 2 | R101,104 | RM73B2B202J RN resistance (CP) | 323A5015J0202 | 2 | |
| 3 | R102,105,106 107,108 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 5 | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | C100-111 | CK3216B1H103K CK condenser (CP) | 303A6009K3103 | 12 | |
| 7 | C2 | TCK45F2E103ZYA 250V CK condenser 10000P | 302A4027Z5103 | 1 | |
| 8 | C1 | CC45L1H561KYR CC condenser | C4LP-8611-561 | 1 | |
| 9 | C112 | CC3216SL1H220J CC condenser (CP) | 303A3008K0220 | 1 | |
| 10 | | | | | |
| 11 | Q3,4 | TMS4416-15NL MOS-D-RAM | 802A2050M6311 | 2 | |
| 12 | Q7 | 75188P BIP-INF-IC | 710A0003M0188 | 1 | |
| 13 | Q6 | 75154P BIP-INF-IC | 710A0003M0154 | 1 | |
| 14 | Q5 | MSM60360GS-VK MOS digital IC (FP) | 702A4924F3060V | 1 | |
| 15 | Q1,2 | DL2-28A-05 IC socket | 245A1155P0280 | 2 | |
| 16 | Q8 | 74LS02FP BIP digital IC (SO) | 700A0503N0002 | 1 | |
| 17 | | | | | |
| 18 | TR2 | 2SC458/458K NPN-HF-TR | 602A1003M0003 | 1 | |
| 19 | TR1,3 | 2SA952 PNP-HF-TR | 600A1123M0014 | 2 | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | CN1 | HKP-26FD2 PC connector | 224A3131P0260 | 1 | |
| 23 | CN2 | D25S-LLD-Hexagonal (#4-40) Angular head connector | 220A0121P0250 | 1 | |

MLRC-Printed Circuit Board (4YA4042-1344Gxxx) 2/2 (2/2) REV. 3

PCB version 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|--------------------------------------|----------------------|------|---------|
| 24 | CN3 | 00-8272-244001112-05 PC connector | 224A3606P0440 | 1 | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | FG bracket (RS-232C) | 3PP4043- 2800P001 | 1 | |
| 28 | | | | | |
| 29 | | Round head rivet | 4LB-180200-2 | 2 | |
| 30 | | | | | |
| 31 | | | | | |
| 32 | EB1 | Power bar L=76.2 | 3LH-31313-62 | 1 | |
| 33 | | | | | |
| 34 | SP1-3 | FFC-3AMEP1 FC connector | 225A3123P0030 | 3 | |
| 35 | SB1-3 | DIC-252 PC connector | 224A3182P0020 | 3 | |
| 36 | | | | | |
| 37 | | | | | |
| 38 | | | | | |
| 39 | | | | | |
| 40 | | | | | |
| 41 | | | | | |
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| 46 | | | | | |
| 47 | | | | | |
| 48 | | | | | |
| 49 | | | | | |
| 50 | | | | | |



| G. No. | ROM No. | ROM code No. | Product name |
|--------|---------|--------------|--------------|
| G200 | Q2 | "67-1073" | 27256 |
| | Q1 | "67-1056" | 27256 |
| G201 | Q2 | "67-1074" | 27256 |
| | Q1 | "67-1057" | 27256 |
| G202 | Q2 | "67-1073" | 27256 |
| | Q1 | "67-1056" | 27256 |
| G203 | Q2 | "67-1074" | 27256 |
| | Q1 | "67-1057" | 27256 |
| G204 | Q2 | "67-1077" | 27256 |
| | Q1 | "67-1060" | 27256 |
| G205 | Q2 | "67-1078" | 27256 |
| | Q1 | "67-1061" | 27256 |
| G206 | Q2 | "67-1077" | 27256 |
| | Q1 | "67-1060" | 27256 |
| G207 | Q2 | "67-1078" | 27256 |
| | Q1 | "67-1061" | 27256 |

MLSI-Printed Circuit Board Assembly (4YA4042-1067G200)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1056G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1073G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P600 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |

MLSI-Printed Circuit Board Assembly (4YA4042-1067G201)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1057G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1074G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P601 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |

MLSI-Printed Circuit Board Assembly (4YA4042-1067G202)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1056G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1073G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P600 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLSI-Printed Circuit Board Assembly (4YA4042-1067G203)

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1057G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1074G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P601 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLSI-Printed Circuit Board Assembly (4YA4042-1067G204) 2/2

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1060G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1077G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P600 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |

MLSI-Printed Circuit Board Assembly (4YA4042-1067G205) 2/2

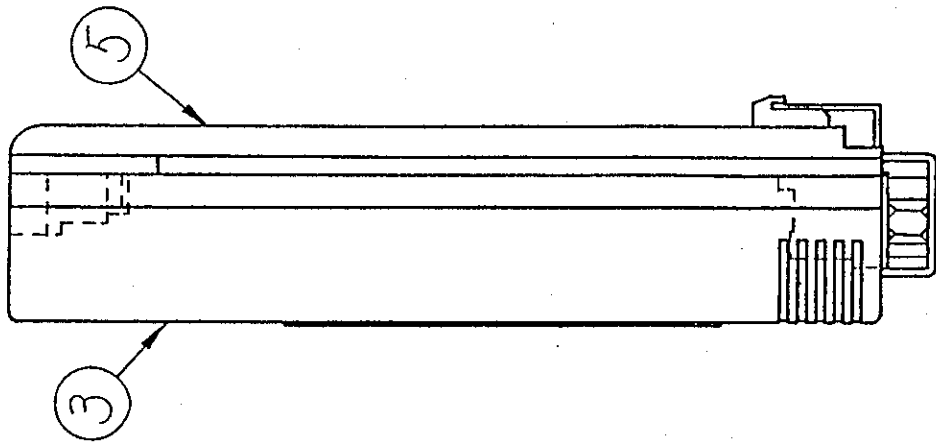
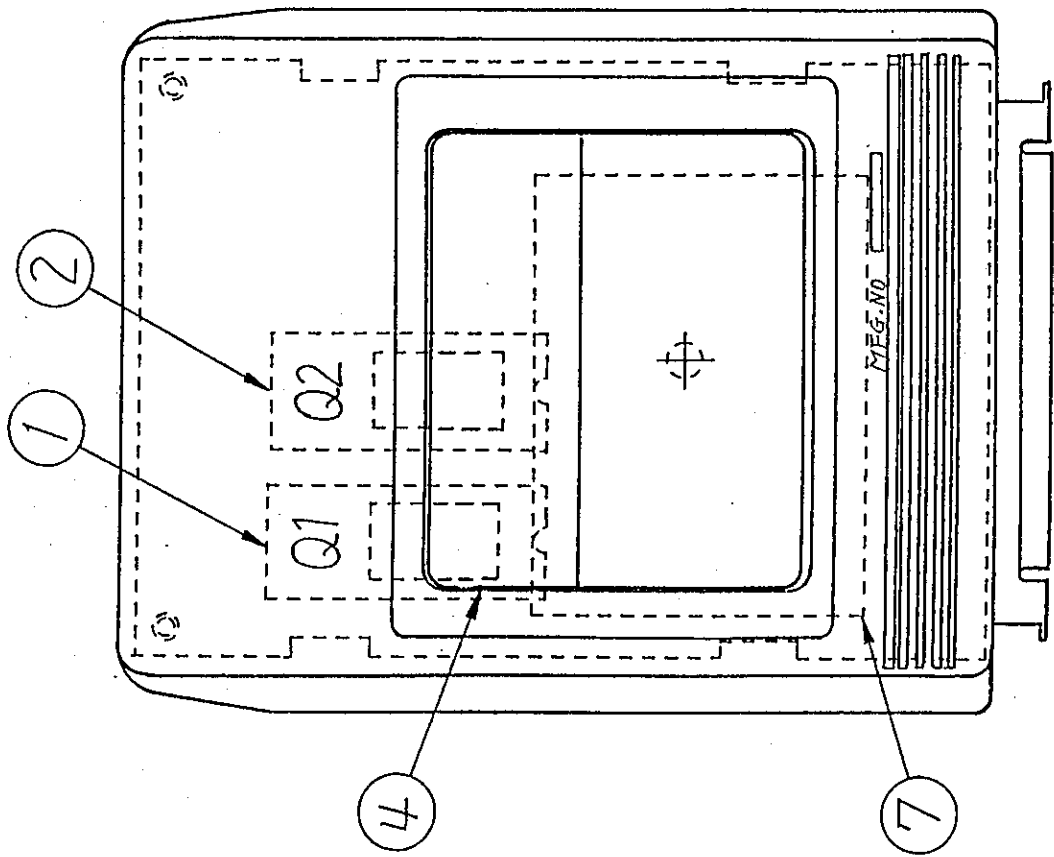
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1061G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1078G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P601 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |

MLSI-Printed Circuit Board Assembly (4YA4042-1067G206) 2/2

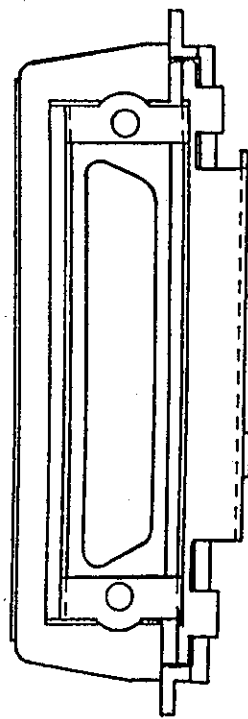
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1060G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1077G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P600 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLSI-Printed Circuit Board Assembly (4YA4042-1067G207) 2/2

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4067-1061G1 | 1 | |
| 2 | | CG ROM | 4YR4067-1078G1 | 1 | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P601 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |



| G. No. | ROM No. | ROM code No. | Product name |
|--------|---------|--------------|--------------|
| G230 | | | |
| | Q1 | "77-1056" | 27512 |
| G231 | | | |
| | Q1 | "77-1057" | 27512 |
| G232 | | | |
| | Q1 | "77-1056" | 27512 |
| G233 | | | |
| | Q1 | "77-1057" | 27512 |
| G234 | | | |
| | Q1 | "77-1058" | 27512 |
| G235 | | | |
| | Q1 | "77-1059" | 27512 |
| G236 | | | |
| | Q1 | "77-1058" | 27512 |
| G237 | | | |
| | Q1 | "77-1059" | 27512 |



MLSI-Printed Circuit Board Assembly (4YA4042-1346G230) 2/2 REV. 3
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1056G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5422P600 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |

MLSI-Printed Circuit Board Assembly (4YA4042-1346G231) 2/2 REV. 3
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1057G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5422P601 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |

MLSI-Printed Circuit Board Assembly (4YA4042-1346G232) 2/2 REV. 3
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1056G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P600 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLSI-Printed Circuit Board Assembly (4YA4042-1346G233) 2/2 REV. 3
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1057G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5422P601 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLSI-Printed Circuit Board Assembly (4YA4042-1346G234) 2/2 REV. 3
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1058G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P600 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |

MLSI-Printed Circuit Board Assembly (4YA4042-1346G235) 2/2 REV. 3
PCB version 3

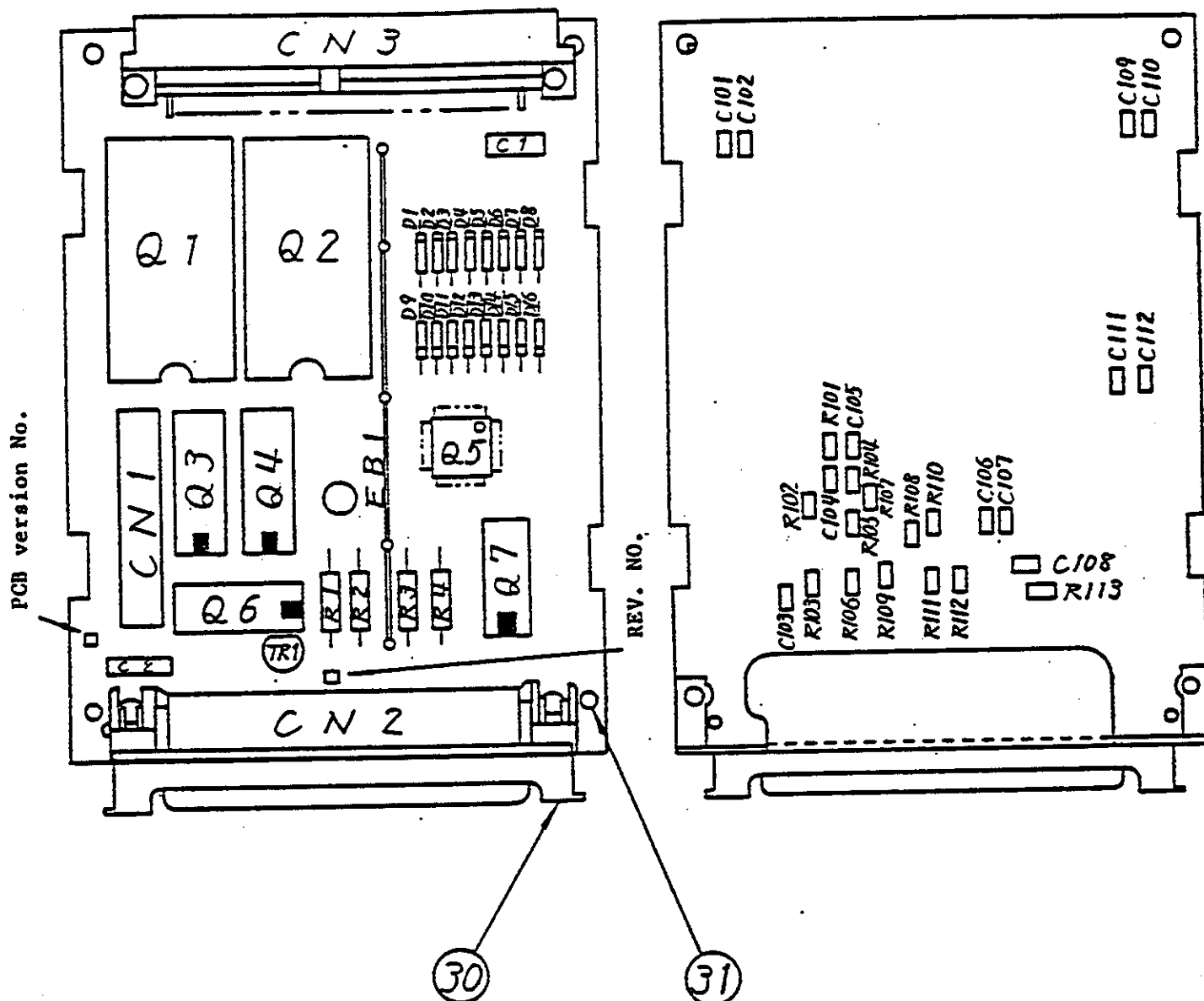
| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|----------------------------|----------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1059G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012- 5525P601 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | | | | |

MLSI-Printed Circuit Board Assembly (4YA4042-1346G236) 2/2 REV. 3
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1058G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P600 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |

MLSI-Printed Circuit Board Assembly (4YA4042-1346G237) 2/2 REV. 3
PCB version 3

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|-------------------------|------------------|------|---------|
| 1 | | PG ROM | 4YR4077-1059G1 | 1 | |
| 2 | | | | | |
| 3 | | Personal card cover (U) | 2PB4043-2265P1 | 1 | |
| 4 | | Label for PM | 3PB4012-5525P601 | 1 | |
| 5 | | Personal card case (L) | 2PB4043-2266P1 | 1 | |
| 6 | | Locking cover | 2PB4016-3121P1 | 1 | |
| 7 | | RAM | 4YA4042-1065G3 | 1 | |



| Part name | Rev. No. | PCB version No. | Remarks |
|-----------|----------|-----------------|----------------|
| MLSI- | 2 | 2 | 2YU5005-1027G1 |

MLSI-Printed Circuit Board (4YA4042-1067Gxxx) 1/2

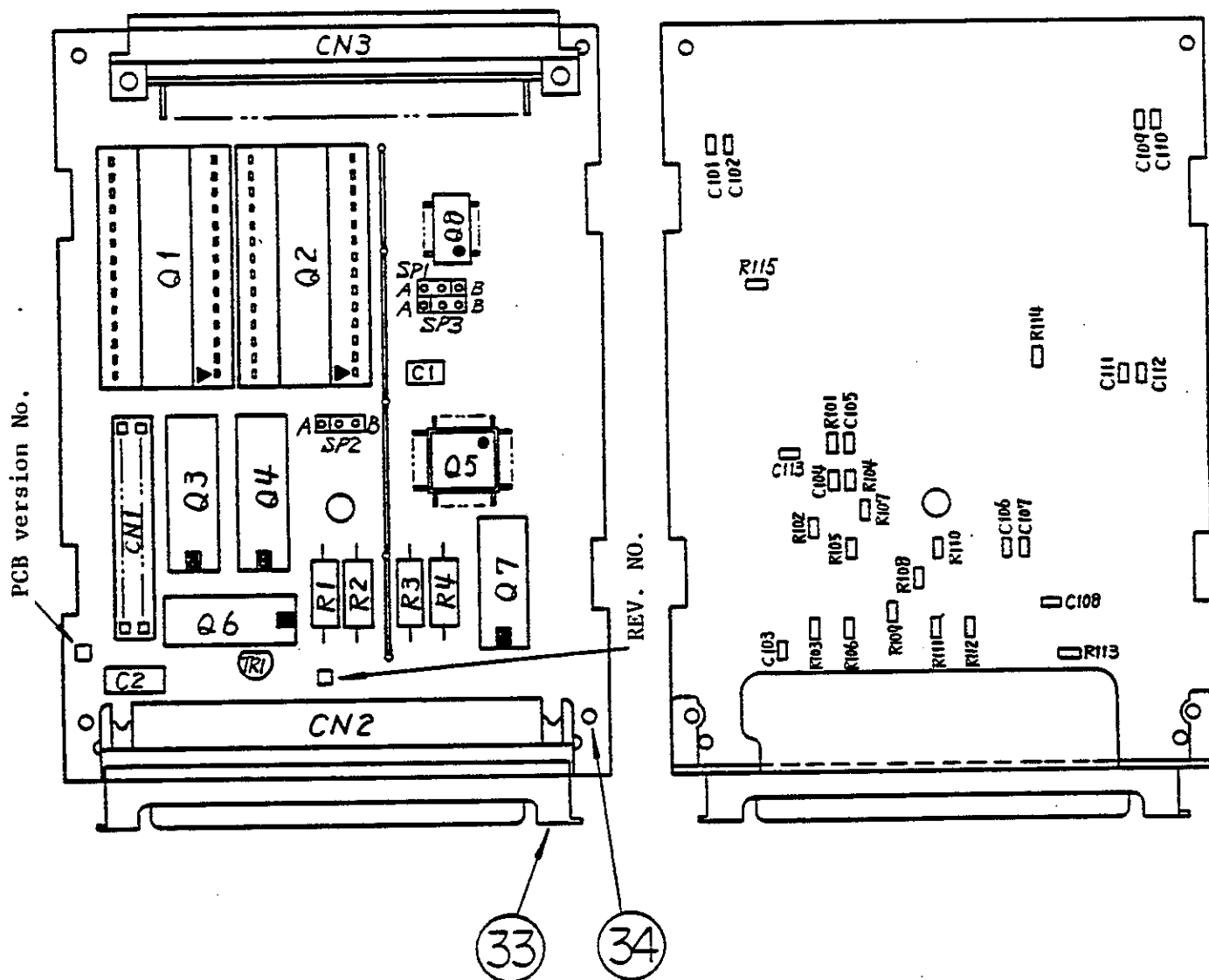
MLSI-Printed Circuit Board (4YA4042-1067Gxxx) 2/2 (1/2) REV. 2

PCB version 2

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|------------------------------|--|----------------|------|---------|
| 1 | D1-16 | RD20E-B Zener DI | 613A1231L0252 | 16 | |
| 2 | | | | | |
| 3 | R104,107,113 | RM73B2B362J RN resistance (CP) | 323A5015J0362 | 3 | |
| 4 | R102,103,105, 106,108-111 | RM73B2B102J RN resistance (CP) | 323A5015J0102 | 8 | |
| 5 | R112 | RM73B2B202J RN resistance (CP) | 323A5015J0202 | 1 | |
| 6 | R1-4 | RD1/2Y120ΩJ RD resistance | 321A1431J0121 | 4 | |
| 7 | R101 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 1 | |
| 8 | | | | | |
| 9 | C101-112 | CK3216B1H103K CK capacitor (CP) | 303A6009K3103 | 12 | |
| 10 | C2 | TCK45F2E103ZYA 250V CK capacitor 10000P | 302A4027Z5103 | 1 | |
| 11 | C1 | CC45L1H561KYR CC capacitor | C4LP-8611-561 | 1 | |
| 12 | | | | | |
| 13 | Q5 | MSM60360GS-VK MOS digital IC (FP) | 702A4924F3060V | 1 | |
| 14 | Q3,4 | TMS4416-15NL MOS-D-RAM | 802A2050M6311 | 2 | |
| 15 | Q6 | AM26LS31PC BIP-INF-IC | 710A0854M0001 | 1 | |
| 16 | Q7 | AM26LS32PC BIP-INF-IC | 710A0854M0002 | 1 | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | TR1 | 2SA952 PNP-HF-TR | 600A1123M0014 | 1 | |
| 21 | | | | | |
| 22 | Q1,2 | DL2-28A-05 IC socket | 245A1155P0280 | 2 | |

MLSI-Printed Circuit Board (4YA4042-1067Gxxx) 2/2 (2/2) REV. 2
PCB version 2

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|---|----------------------|------|---------|
| 23 | CN2 | 17LE-13370-27 (D3CC) Angular head connector | 220A1450P0370 | 1 | |
| 24 | CN1 | HKP-26FD2 PC connector | 224A3131P0260 | 1 | |
| 25 | CN3 | 00-8272-244001112-05 PC connector | 224A3606P0440 | 1 | |
| 26 | | | | | |
| 27 | EB1 | Power bar L=76.2 | 3LH-31313-62 | 1 | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | FG bracket (RS-422A) | 3PP4043- 2286P001 | 1 | |
| 31 | | Round head rivet | 4LB-180200-2 | 2 | |



| Part name | Rev. No. | PCB version No. | Remarks |
|-----------|----------|-----------------|----------------|
| MLSI- | 3 | 3, 4 | 2YU5005-1027G1 |

MLSI-Printed Circuit Board (4YA4042-1346Gxxx) 1/2 (2/2)

MLSI-Printed Circuit Board (4YA4042-1346Gxxx) 2/2 (1/2) REV. 3

PCB version 3, 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|------------------------------|--|----------------|------|---------|
| 1 | R104,107,113 | RM73B2B362J RN resistance (CP) | 323A5015J0362 | 3 | |
| 2 | R102,103,105, 106,108-111 | RM73B2B102J RN resistance (CP) | 323A5015J0102 | 8 | |
| 3 | R112 | RM73B2B202J RN resistance (CP) | 323A5015J0202 | 1 | |
| 4 | R1-4 | RD1/2Y120ΩJ RD resistance | 321A1431J0121 | 4 | |
| 5 | R101,114,115 | RM73B2B512J RN resistance (CP) | 323A5015J0512 | 3 | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | C101-112 | CK3216B1H103K CK condenser (CP) | 303A6009K3103 | 12 | |
| 9 | C2 | TCK45F2E103ZYA 250V CK condenser 10000P | 302A4027Z5103 | 1 | |
| 10 | C1 | CC45L1H561KYR CC condenser | C4LP-8611-561 | 1 | |
| 11 | C113 | CC3216SL1H220J CC condenser (CP) | 303A3008K0220 | 1 | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | Q5 | MSM60360GS-VK MOS digital IC (FP) | 702A4924F3060V | 1 | |
| 15 | Q3,4 | TMS4416-15NL MOS-D-RAM | 802A2050M6311 | 2 | |
| 16 | Q6 | AM26LS31PC BIP-INF-IC | 710A0854M0001 | 1 | |
| 17 | Q7 | AM26LS32PC BIP-INF-IC | 710A0854M0002 | 1 | |
| 18 | Q8 | 74LS02FP BIP digital IC (SO) | 700A0503N0002 | 1 | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | TR1 | 2SA952 PNP-HF-TR | 600A1123M0014 | 1 | |

MLSI-Printed Circuit Board (4YA4042-1346Gxxx) 2/2 (2/2) REV. 3
PCB version 3, 4

| No. | Symbol | Name standard | Part No. | Q'ty | Remarks |
|-----|--------|---|----------------------|------|---------|
| 22 | | | | | |
| 23 | | | | | |
| 24 | Q1,2 | DL2-28A-05 IC socket | 245A1155P0280 | 2 | |
| 25 | CN2 | 17LE-13370-27 (D3CC) Angular head connector | 220A1450P0370 | 1 | |
| 26 | CN1 | HKP-26FD6 PC connector | 224A3131P0260 | 1 | |
| 27 | CN3 | 00-8272-244001112-05 PC connector | 224A3606P0440 | 1 | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | EB1 | Power bar L=76.2 | 3LH-31313-62 | 1 | |
| 31 | | | | | |
| 32 | | | | | |
| 33 | | FG bracket (RS-422A) | 3PP4043- 2286P001 | 1 | |
| 34 | | Round head rivet | 4LB-180200-2 | 2 | |
| 35 | | | | | |
| 36 | | | | | |
| 37 | SP1-3 | FFC-2AMEP1 FC connector | 225A3123P0030 | 3 | |
| 38 | SB1-3 | DIC-252 PC connector | 224A3182P0020 | 3 | |

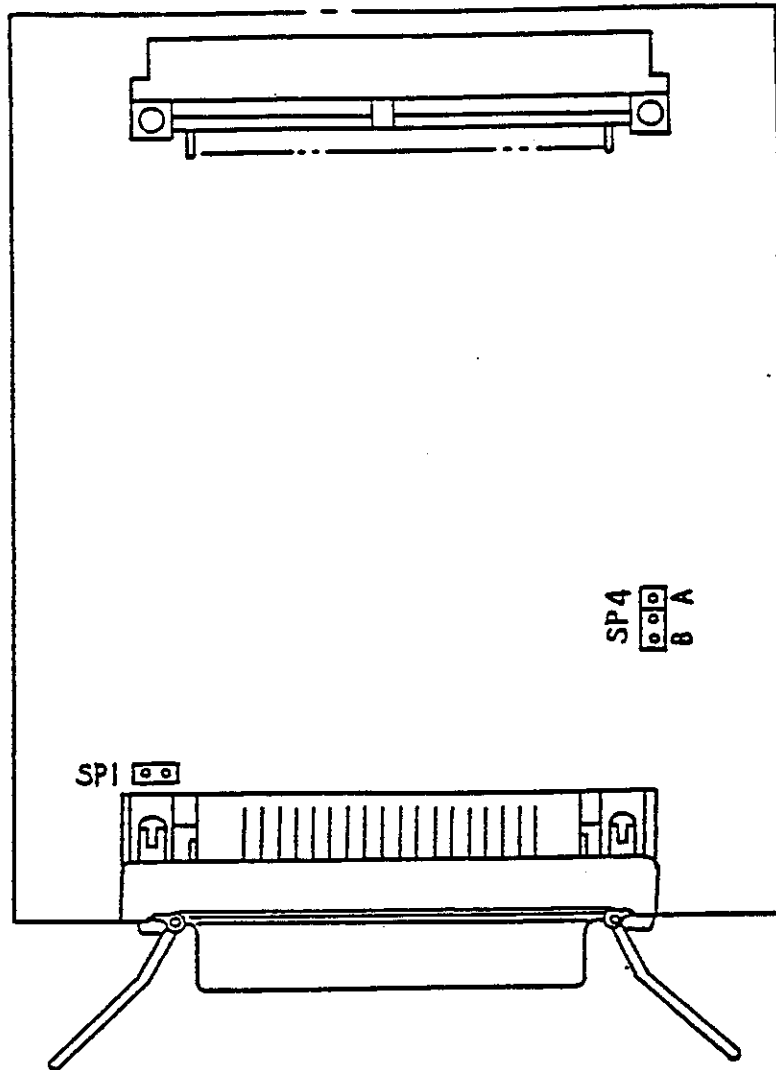
APPENDIX

Appendix: Explanation of the personality module short plug (1/2)

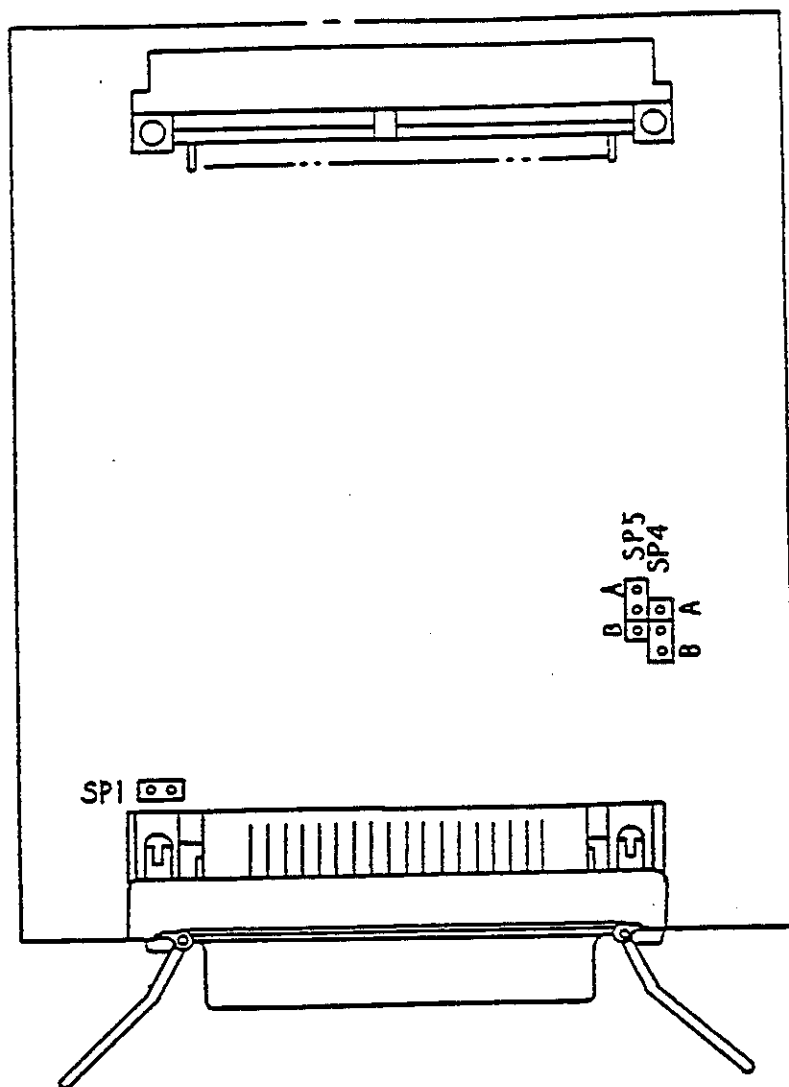
| Module type | Rev. 1 Software case | | Rev. 2 Hardware case | | |
|--|----------------------|--|--|----------|--|
| | SP1 | SP2 | SP1 | Provided | Output +5 V to the interface connector 18 pin. - standard |
| Centronics parallel interface personality module | | Uses Q1 27128 at B - standard | | None | Open the interface connector 18 pin |
| | SP2 | Uses Q2 27256 at A Uses Q2 27128 at B - standard | SP2 | A B | Not mounted |
| | SP3 | Uses Q3 27256 at A - standard Uses Q3 27128 at B | SP3 | A B | Not mounted |
| | SP4 | Uses Q4 27256 at A - standard Uses Q4 27128 at B | SP4 | A B | I - PRIME signal valid I - PRIME signal invalid - standard |
| | SP5 | Provided Output +5 V to the interface connector 18 pin. - standard None Open the interface connector 18 pin | SP5 | A B | Ground fixing the interface connector 14 pin ground - standard Interface connector 14 pin to the input port |
| | SP6 | A I - PRIME signal valid B I - PRIME signal invalid - standard | Note: For SP5, the board version number 3 is not mounted. At this time, the interface connector 14 pin is fixed on the ground. | | |
| RS-232C serial interface personality module | SP1 | Uses Q1 27256 at A | | | |
| | SP2 | Uses Q1 27128 at B - standard Uses Q2 27256 at A | | | |
| | SP3 | Uses Q2 27128 at B - standard Uses Q3 27256 at A - standard | | | |
| | SP4 | Uses Q3 27128 at B Uses Q4 27256 at A - standard | | | |

Appendix: Explanation of the personality module short plug (2/2)

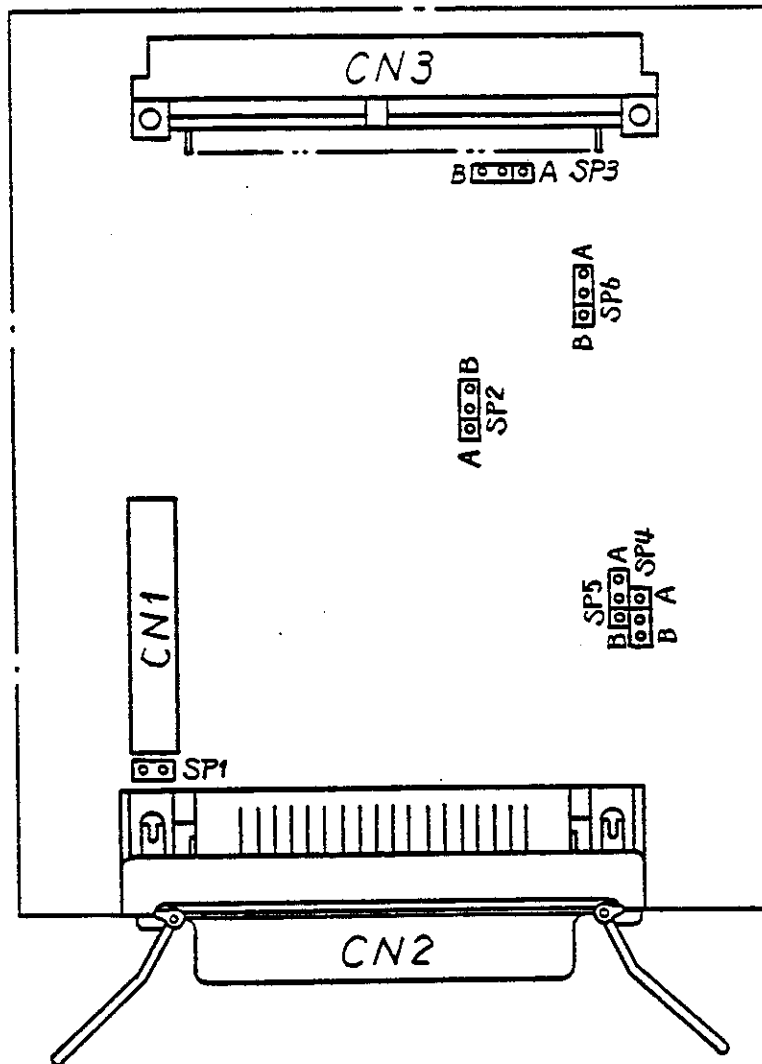
| Module type | Rev. 2 Hardware case | | | | Rev. 3 | | | |
|--|---|---------------------------------|--|----------------------------------|--------|-----------------------------------|--|--|
| | SP1 | Yes | +5 V output to interface connector pin 18 - standard | Interface connector pin 18: open | SP1 | Yes | +5 V output to interface connector pin 18 - standard | |
| Centronics parallel interface personality module | | No | Interface connector pin 18: open | | | No | Interface connector pin 18: open | |
| | SP2 | A | Not mounted | | SP2 | Uses | Q1 27256 in A | |
| | | B | | | | Uses | Q1 27512 in B - standard | |
| | SP3 | A | Not mounted | | SP3 | Uses | Q1 27256 in A | |
| | | B | | | | Uses | Q1 27512 in B - standard | |
| | SP4 | I-PRIME signal invalid | | SP4 | A | I - PRIME signal invalid | | |
| | | I-PRIME signal valid - standard | | | B | I - PRIME signal valid - standard | | |
| | SP5 | A | Interface connector pin 14: grounded - standard | | SP5 | A | Interface connector pin 14: grounded - standard | |
| | | B | Interface connector pin 14: to input port | | | B | Interface connector pin 14: to input port | |
| | Note: Substrate revision 3 is not mounted on SP5. Interface connector pin 14 shall be grounded. | | | | SP6 | Uses | Q2 27256 in A - standard | |
| RS-232C serial interface personality module | | | | SP1 | Uses | Q2 27128 in A | | |
| | | | | | Uses | Q2 27256 in B - standard | | |
| | | | | SP2 | Uses | Q1 27256 in A | | |
| | | | | | Uses | Q1 27512 in B - standard | | |
| | | | | SP3 | Uses | Q1 27256 in A | | |
| | | | | | Uses | Q1 27512 in B - standard | | |
| RS-422A serial interface personality module | | | | SP1 | Uses | Q2 27256 in A - standard | | |
| | | | | | Uses | Q2 27128 in B | | |
| | | | | SP2 | Uses | Q1 27256 in A | | |
| | | | | | Uses | Q1 27512 in B - standard | | |
| | | | | SP3 | Uses | Q1 27256 in A | | |
| | | | | | Uses | Q1 27512 in B - standard | | |



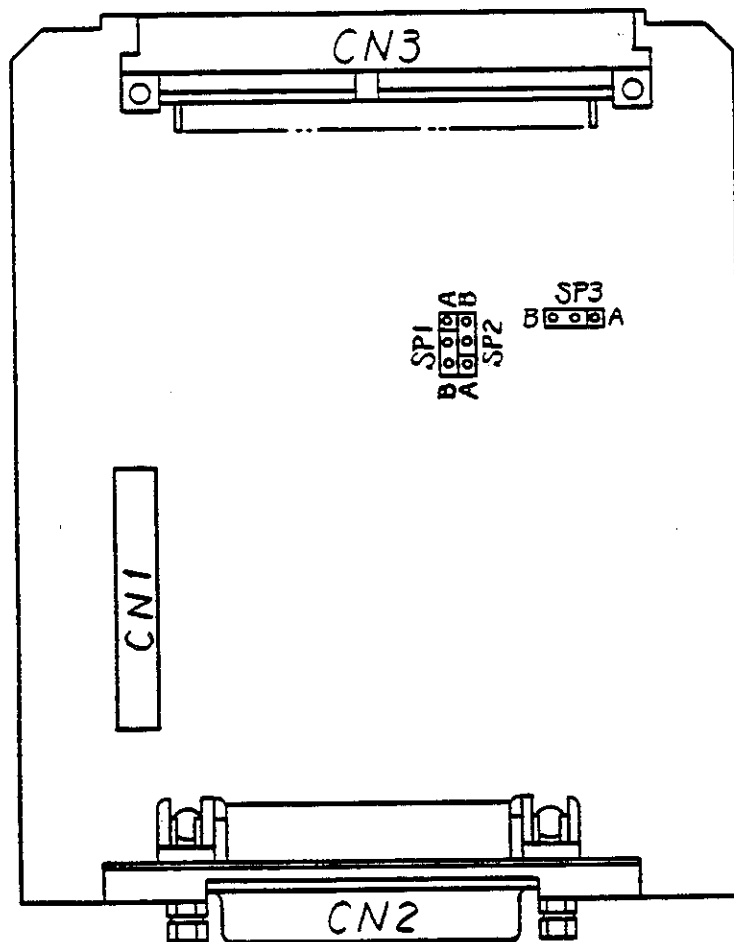
Centronics parallel interface personality module Rev. 2
(Board version number 3)



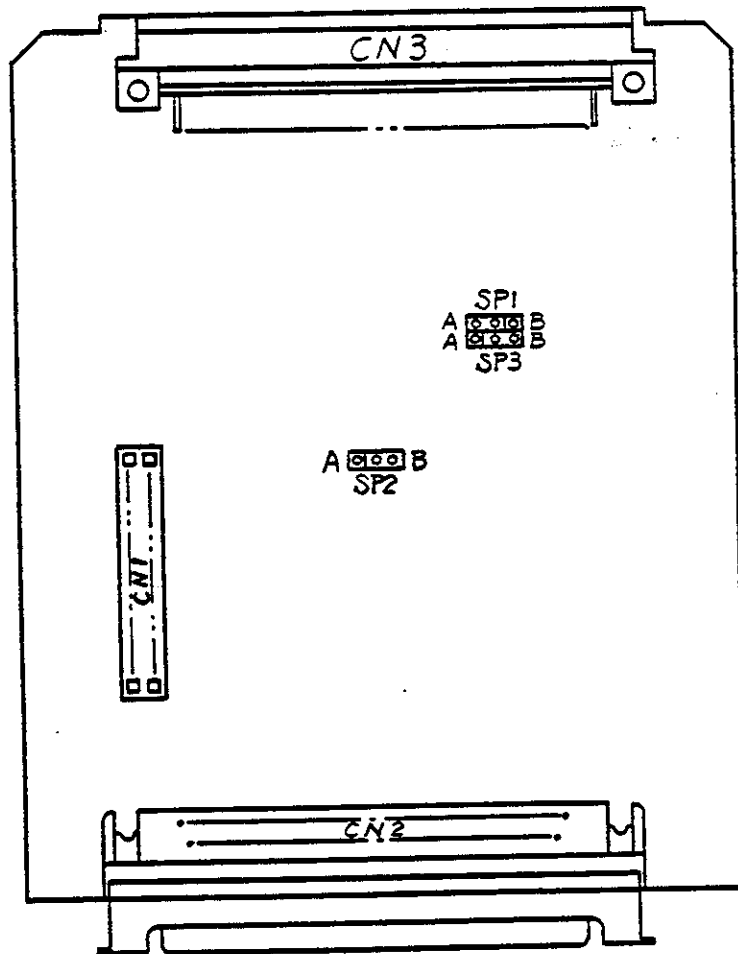
Centronics parallel interface personality module Rev. 2
 (Board version number 4, 5)



Centronics parallel interface personality module Rev. 3
 (Board version number 6-)



RS-232C serial interface personality module Rev. 3
(Board version number 4-)



RS-422A serial interface personality module Rev. 3
(Board version number 3, 4)

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